

U.S. PC Industry



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Contents



- ❖ History & Business Model
- ❖ Overview & Outlook
- ❖ Ratio Analysis
- ❖ Dell
- ❖ HP
- ❖ Apple





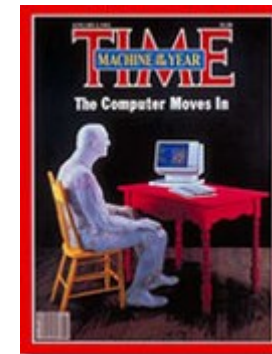
Early History of PC



- ❖ 1975 Altair 8800 (\$800)
- ❖ CPU: Intel 8080
- ❖ Microsoft was founded to make BASIC for the Altair



- ❖ 1981 IBM PC (\$1,600)
- ❖ CPU: Intel 8088
- ❖ IBM PC DOS was licensed from Microsoft



- ❖ 1983 APPLE Lisa (\$10,000)
- ❖ CPU: Motorola 68000
- ❖ First APPLE with GUI (Graphical User Interface)





Industry Developments

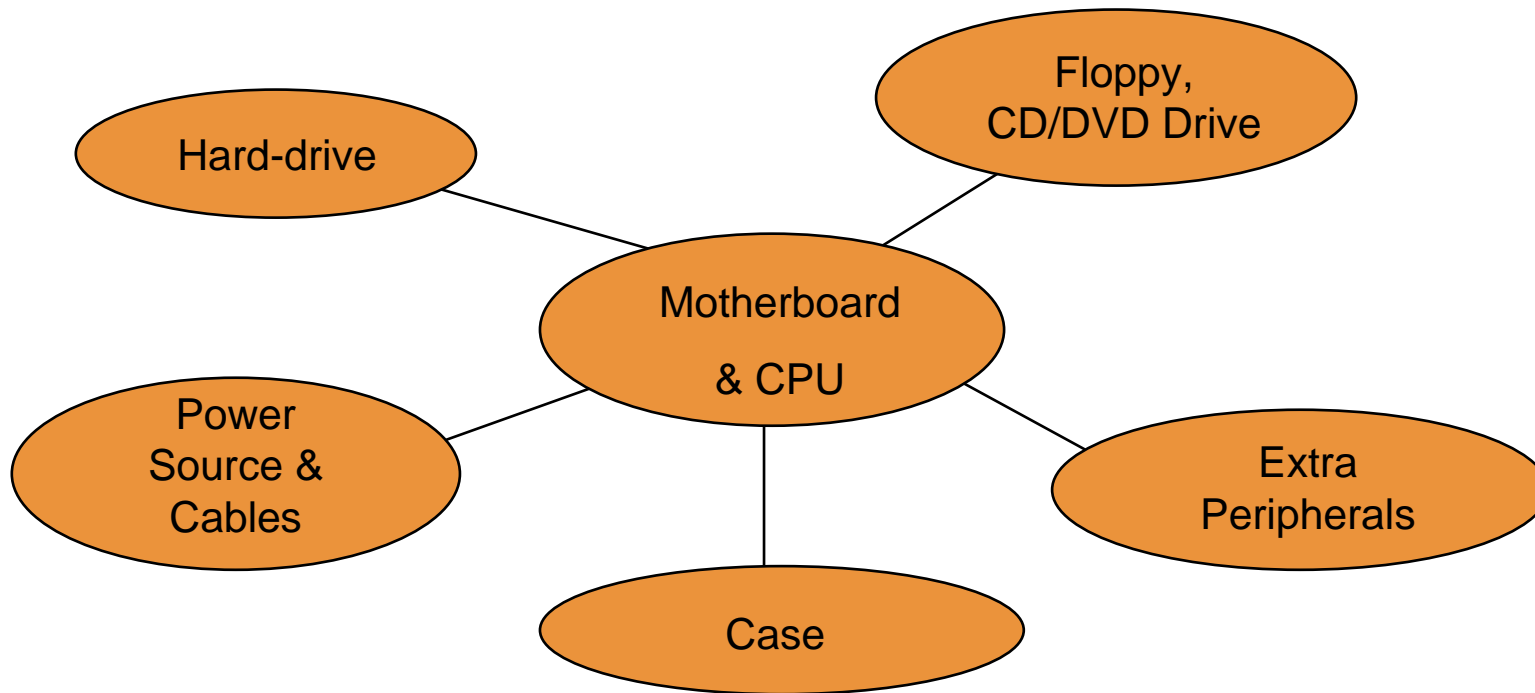


- ❖ 1982 Sun Microsystems (workstation, server)
- ❖ 1994 Netscape ('03 merged by AOL)
- ❖ 1996 Microsoft launched Windows 95
- ❖ 1998 Compaq merged DEC
- ❖ 2002 HP merged Compaq
- ❖ 2004 Gateway merged eMachines
- ❖ 2005 IBM sold PC department to Lenovo





Components of PC





Business Models



- ❖ Big Box
- ❖ Direct
- ❖ White Box





Big Box Model



- ❖ Traditional approach, through “brick and mortar” retailers and own stores
- ❖ Distributors purchase assembled, ready-to-use computers
- ❖ Allows consumers to touch and feel the product
- ❖ Higher cost due to high inventories, longer distribution channel
- ❖ Profit margin eroded





Direct Model



- ❖ Take customized orders directly from end consumers
- ❖ Assemble systems as orders come in
- ❖ Ship the product direct to customers
- ❖ More efficient, JIT inventory system
- ❖ Lower costs due both to inventory savings and distribution by-passing
- ❖ Savings are passed to customers





White Box Model

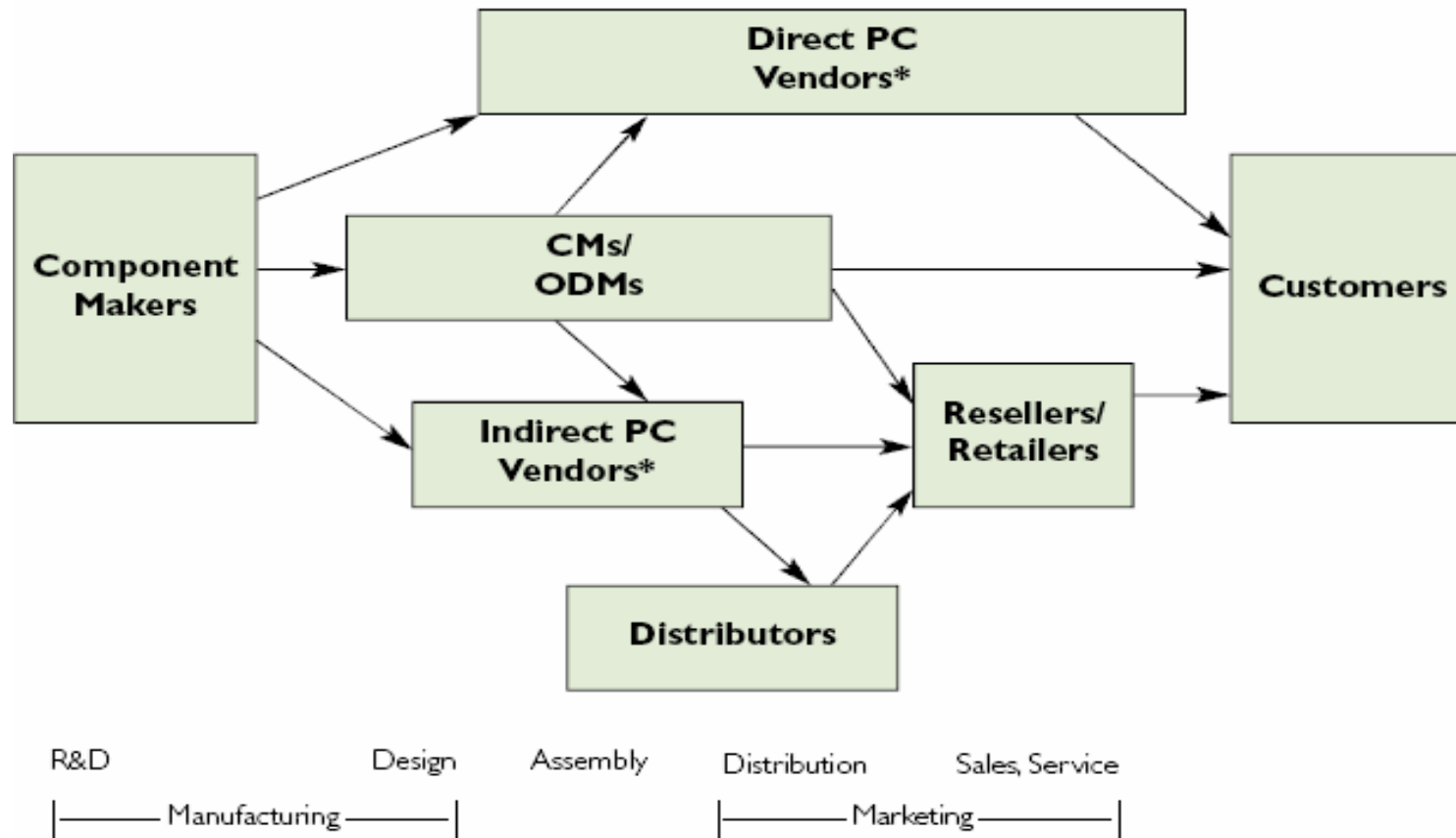


- ❖ Combination of Big Box and Direct Sales Strategies
- ❖ Own distribution facilities
- ❖ Allows consumers to customize their products while giving them a physical location to purchase
- ❖ Highly fragmented, estimated to more than 500 unbranded PC makers
- ❖ Often sell directly to small businesses looking for a significant price break rather than a big brand machine.





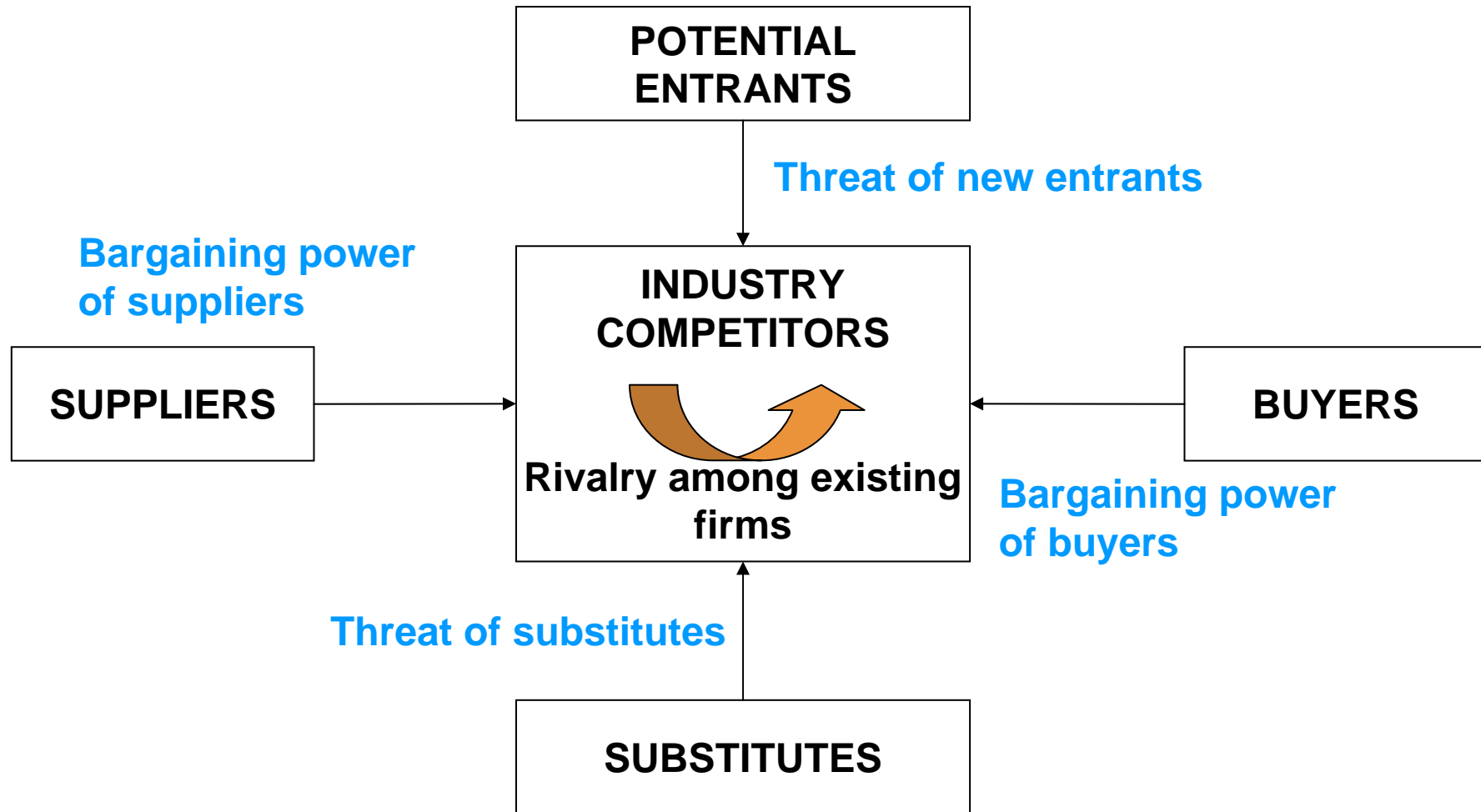
PC Industry Supply Chain, 2004



* Some PC vendors sell through both direct and indirect channels.



Apply 5 Forces Model to PC Industry





PC Industry



❖ Steady and necessary business

But...

❖ Highly Competitive Industry

❖ Limited Differentiation

❖ Low Pricing Power

❖ Capital Intensive





PC Industry



❖ High Entry Barrier

Very difficult to build a brand in PC market
Economy of Scale

❖ High Customers Power

➤ Basic market segmentation

Business, Educational, Government, Home





PC Industry



- ❖ High Suppliers Power

 - Very strong power of MS and Intel

 - Very low power of OEM

- ❖ Potential Substitutes

 - PDA, Internet TV, Mobile phone, PS, XBOX





Global Market Overview



<US & Global PC Shipments and Growth rate>

(unit: mil,%)

Description	2004		2005		2006E	
	Volume	Growth%	Volume	Growth%	Volume	Growth%
Personal	21.8	8.8	23.6	8.2	25.6	8.7
Business	36.5	11.7	40.6	11.2	43.8	8.1
US	58.3	10.6	64.2	10.1	69.5	8.3
Personal	64.3	13.6	77.5	20.5	86.0	11.0
Business	115.1	16.3	130.2	13.1	143.5	10.2
Global	179.4	15.3	207.7	15.8	229.5	10.5

Source: IDC

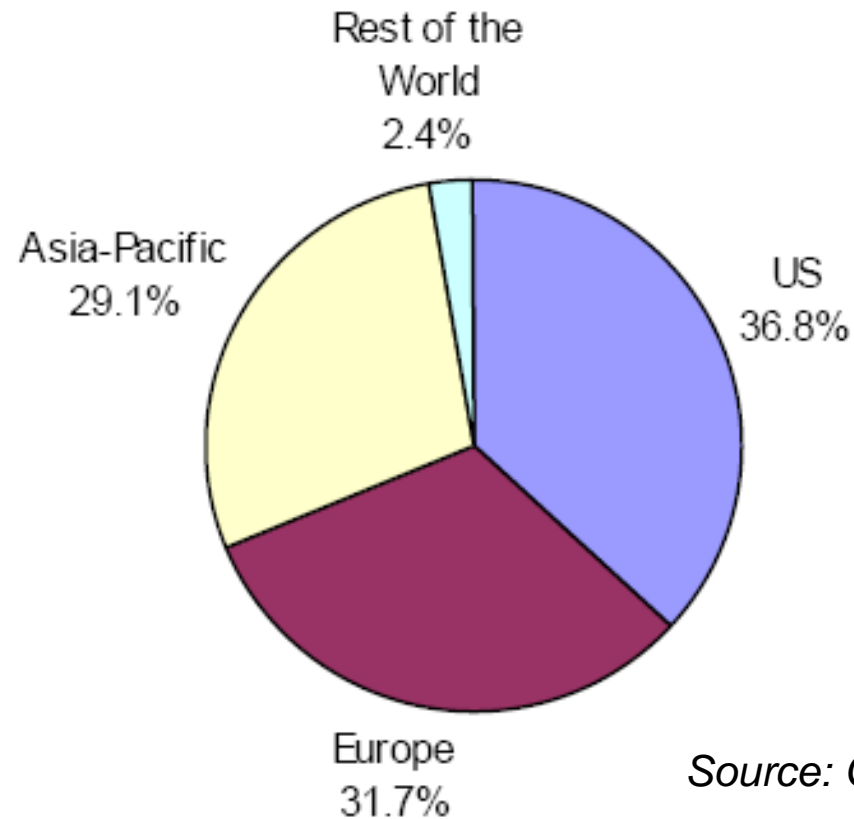




Global Market Overview



- ❖ In terms of value the US represents the largest portion of the global PCs market, accounting for 36.8% of the total revenues.



Source: Global-PCs, Datamonitor (Oct 2005)

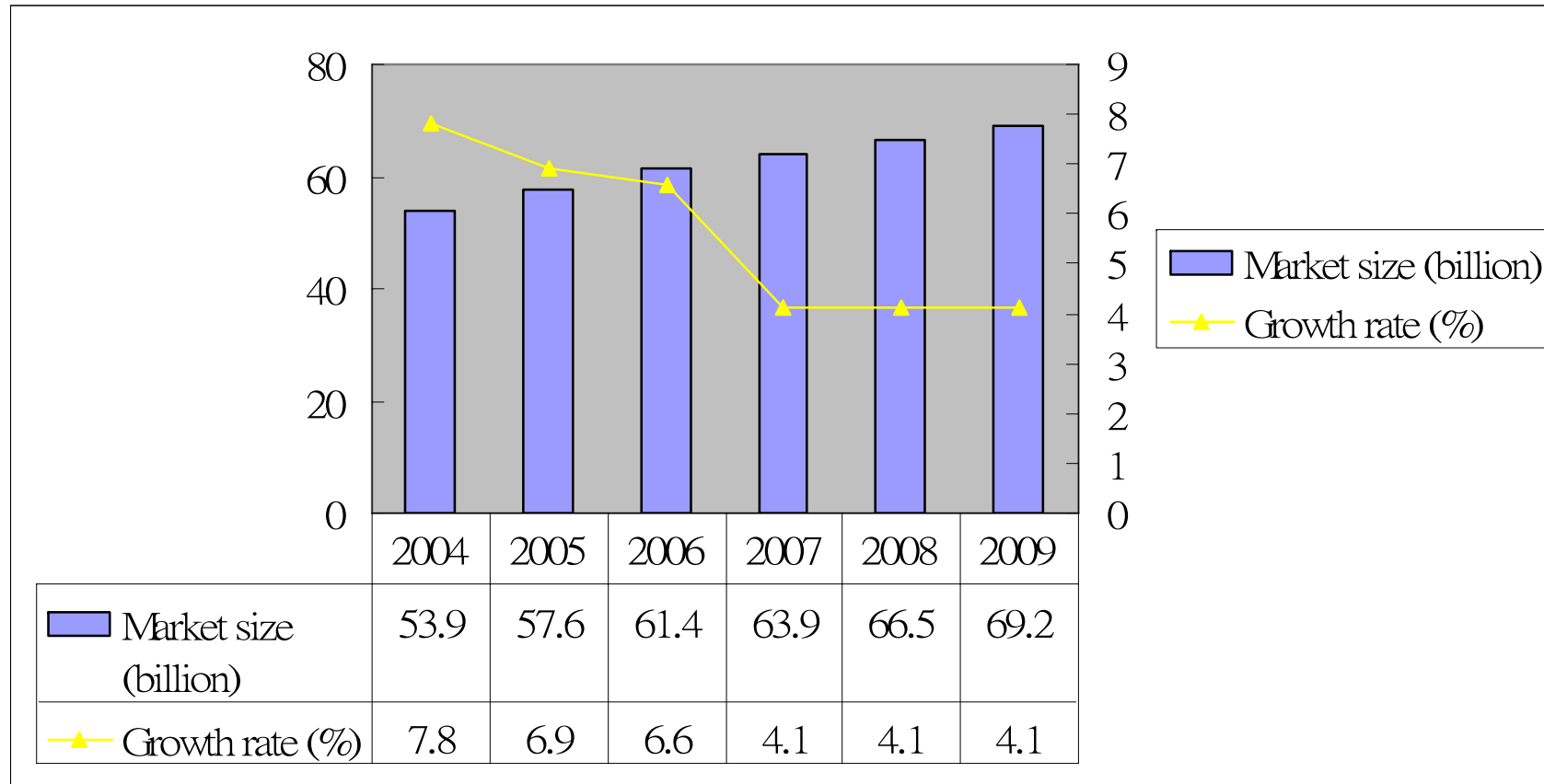




US Desktop Market



<US Desktop PC Market Forecast>



source : *Euromonitor International*

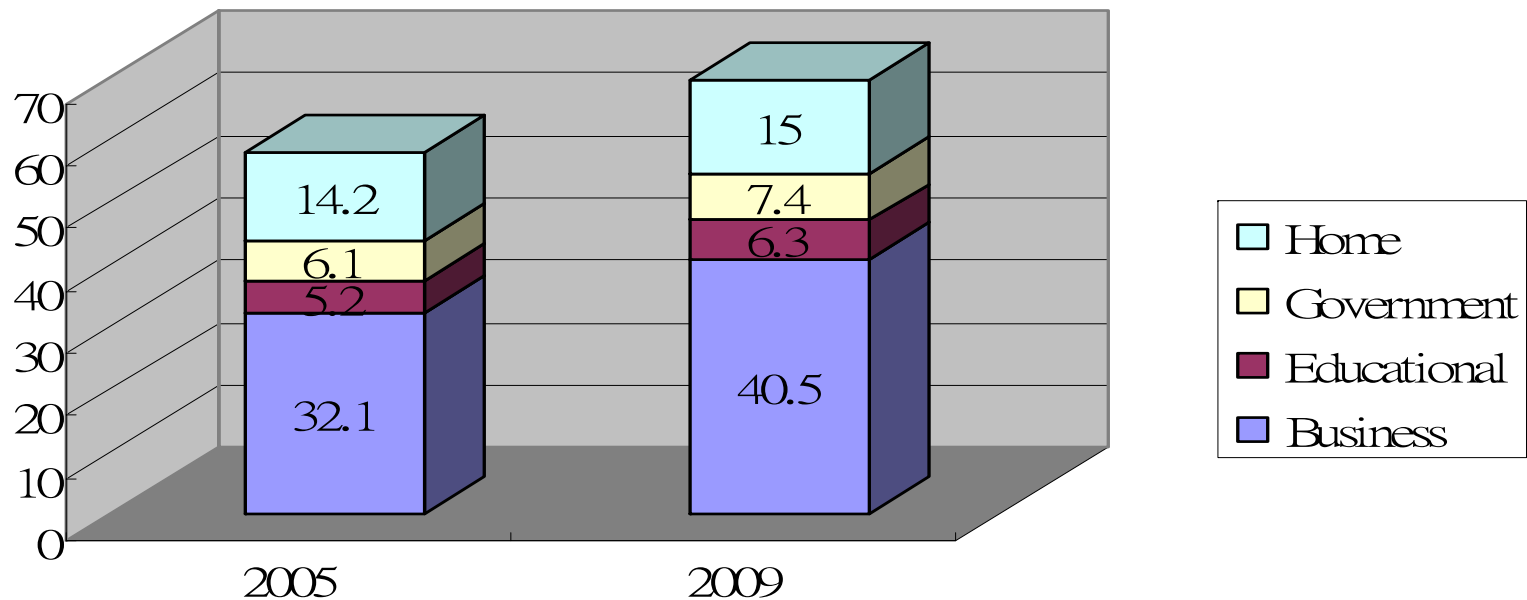




Customer Segmentation



<Desktop consumer segmentation and market share forecast>



	Home	Government	Education	Business
Growth rate, 2005 to 2009	5.6%	21.3%	21.2%	26.2%

source : Euromonitor International

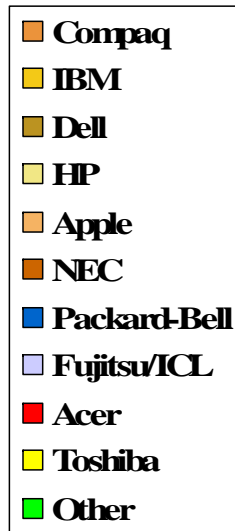
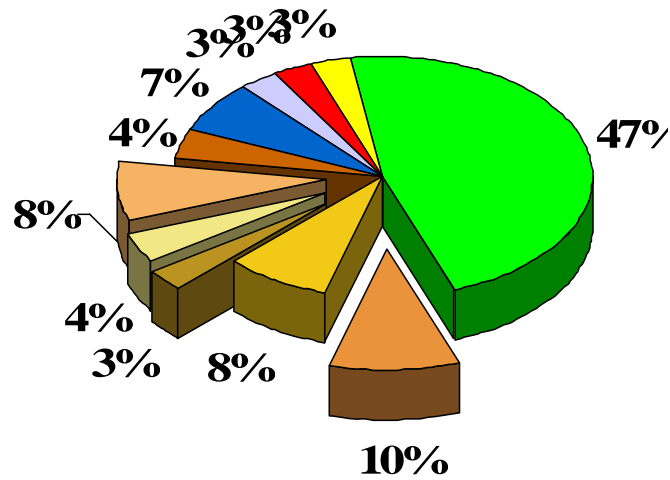




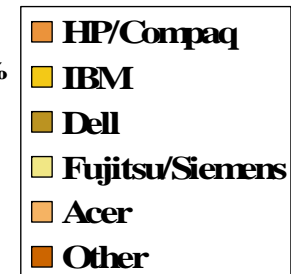
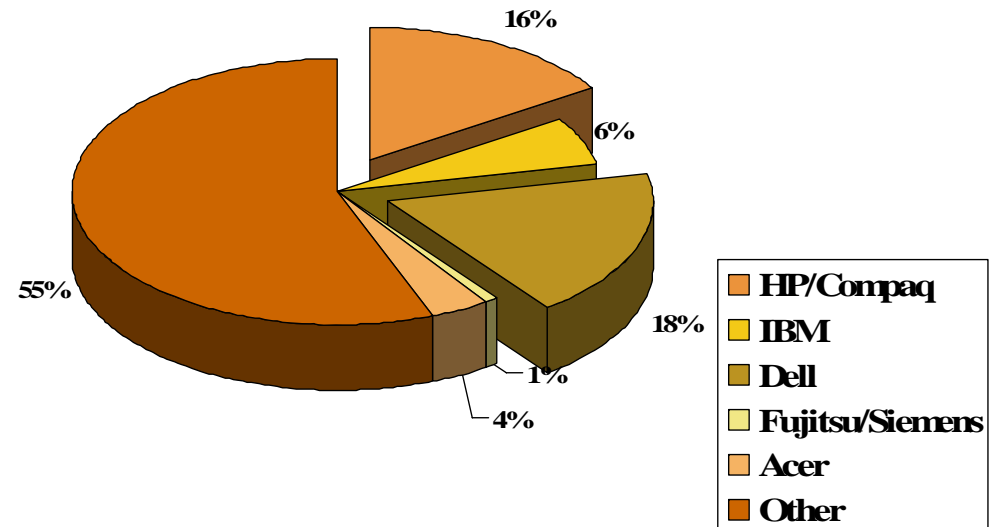
Worldwide Market Share



1995



2004



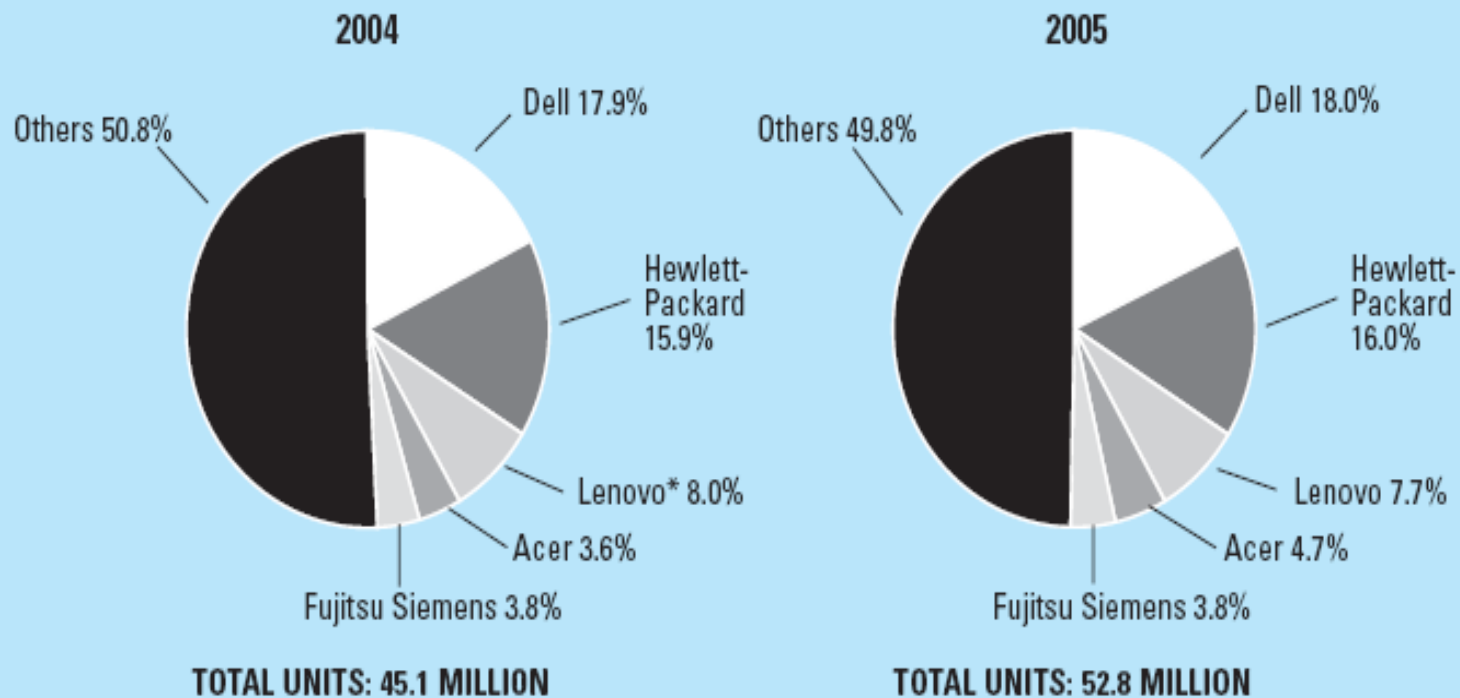


Shipment & Market Share



WORLDWIDE PC SHIPMENTS MARKET SHARE— THIRD QUARTER

(Based on units shipped)



*Lenovo share for 2004 is based on combined IBM and Lenovo data.
Source: IDC.





Industry Outlook



❖ Consolidation likely to continue

- ✓ 1992 Top 10 worldwide vendors accounted for roughly 50%
- ✓ 2002 Top 5 worldwide vendors accounted for 45%
- ✓ 2004 Top 5 world wide vendors accounted for 46.9%
- ✓ Not-too-distant future Top 5 vendors will hold 70%

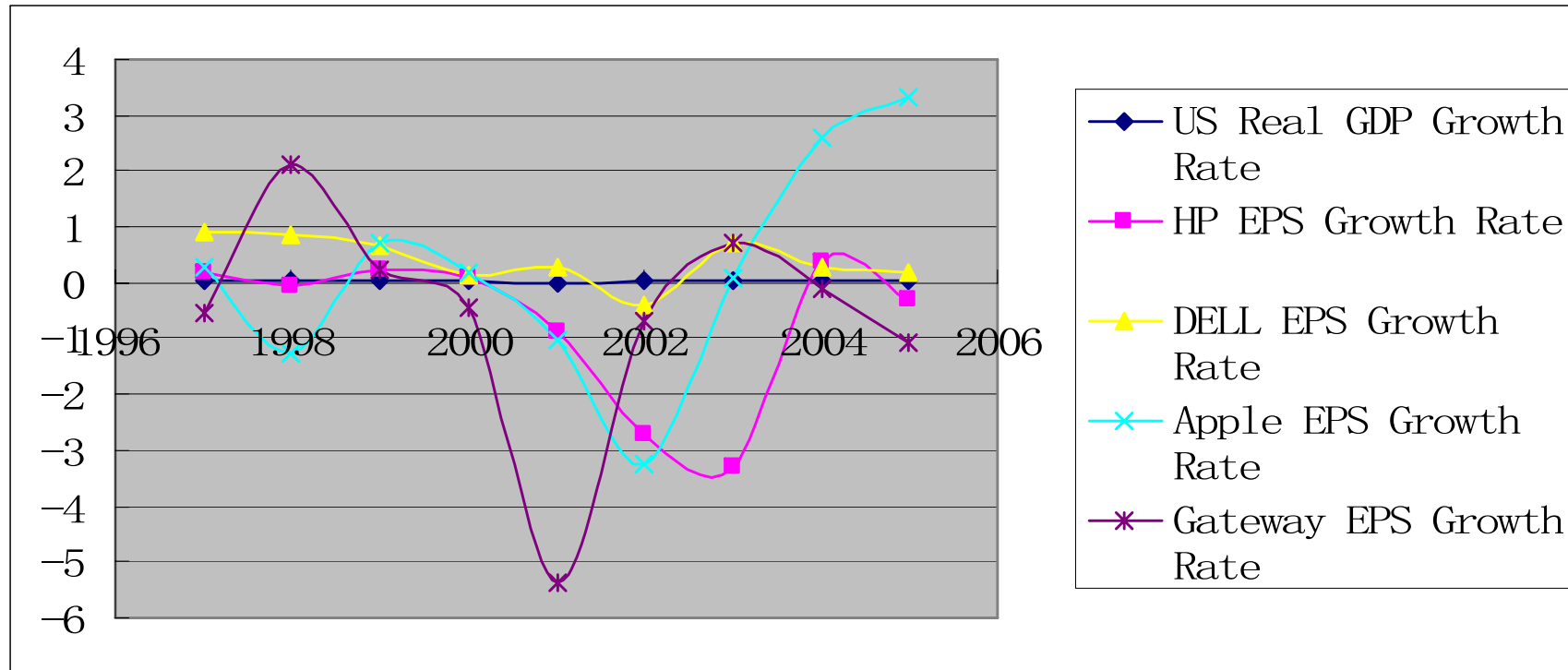
----- S&P' s industry survey

❖ Drive:

- ✓ Consistent pricing pressure
- ✓ Customers increasingly prefer to use a single vendor for all of their computing platforms



U.S Economy Cycle VS EPS of PC Makers



Source: CoreReference, Federal Bank of St. Louis

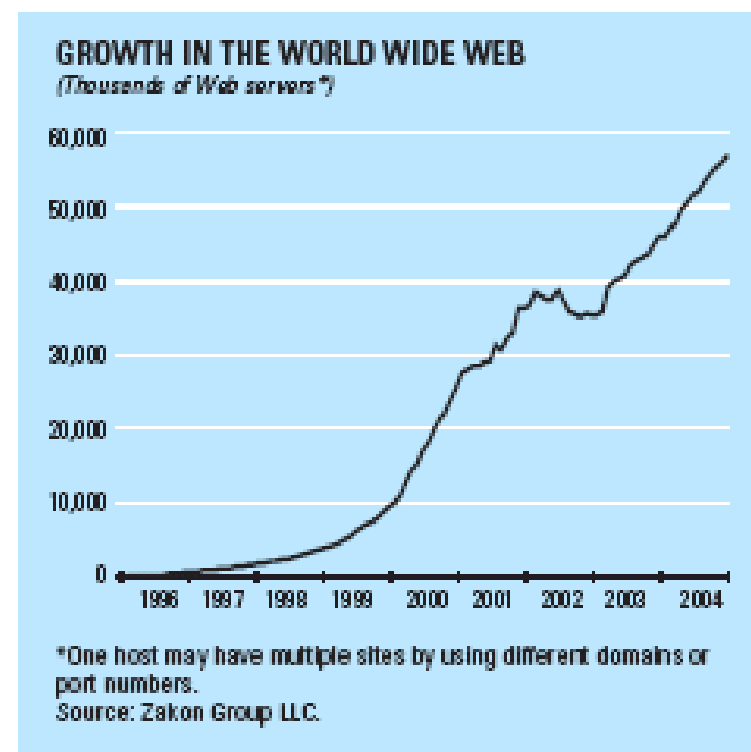
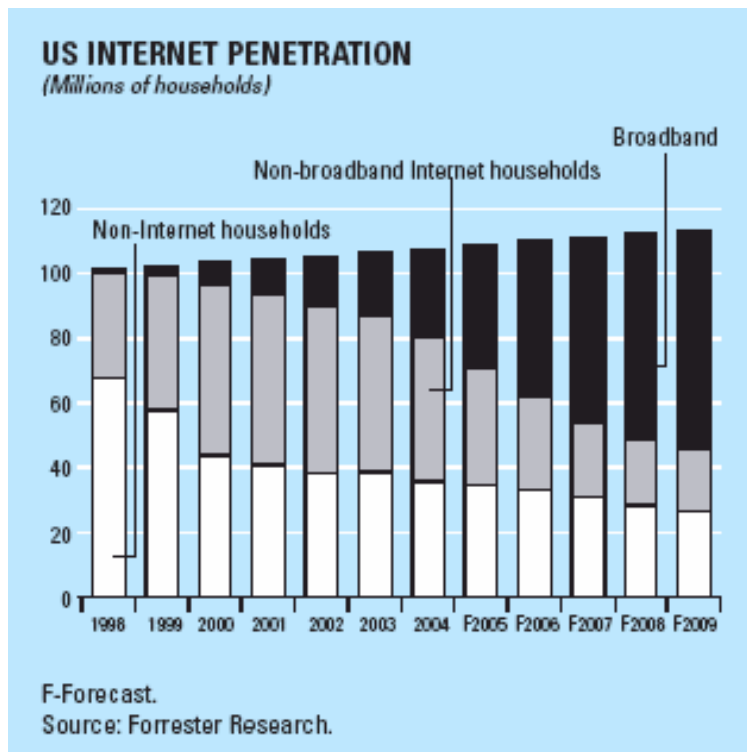




Industry Outlook



- ❖ Internet boosts the stable growth of PCs demand



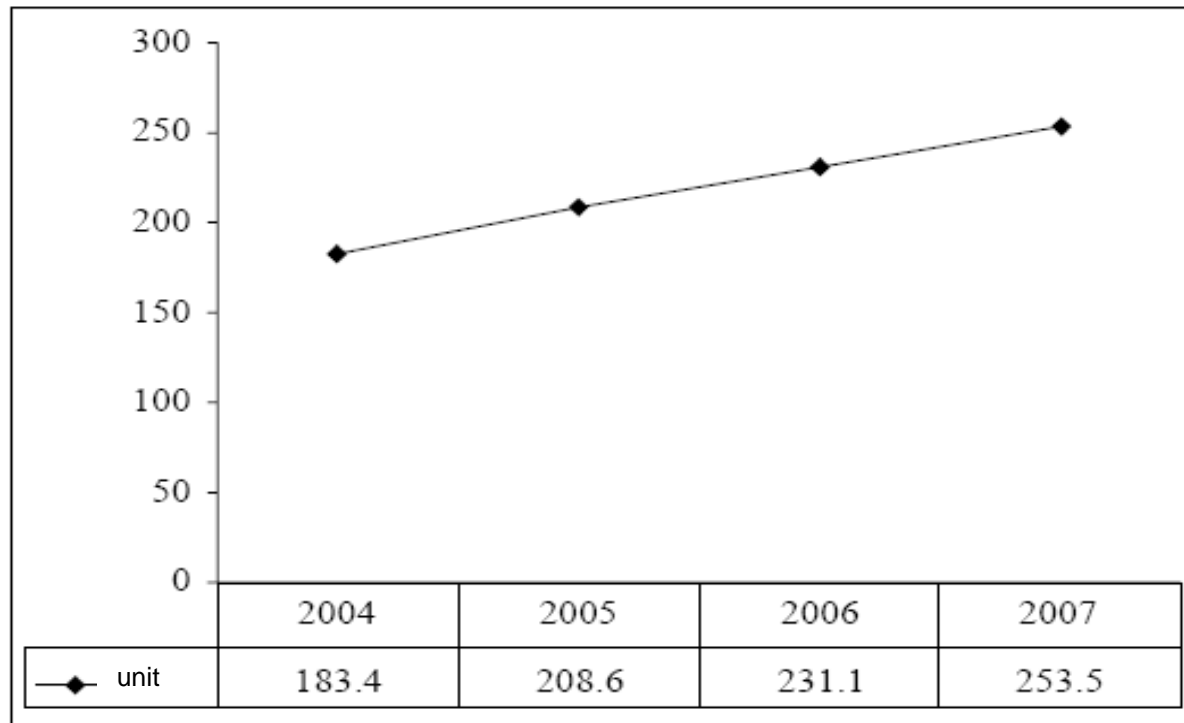


Industry Outlook



Global PC market sales forecast

Unit : million



Notes : Desktop + Laptop

Source : Gartner (Dec, 2005)

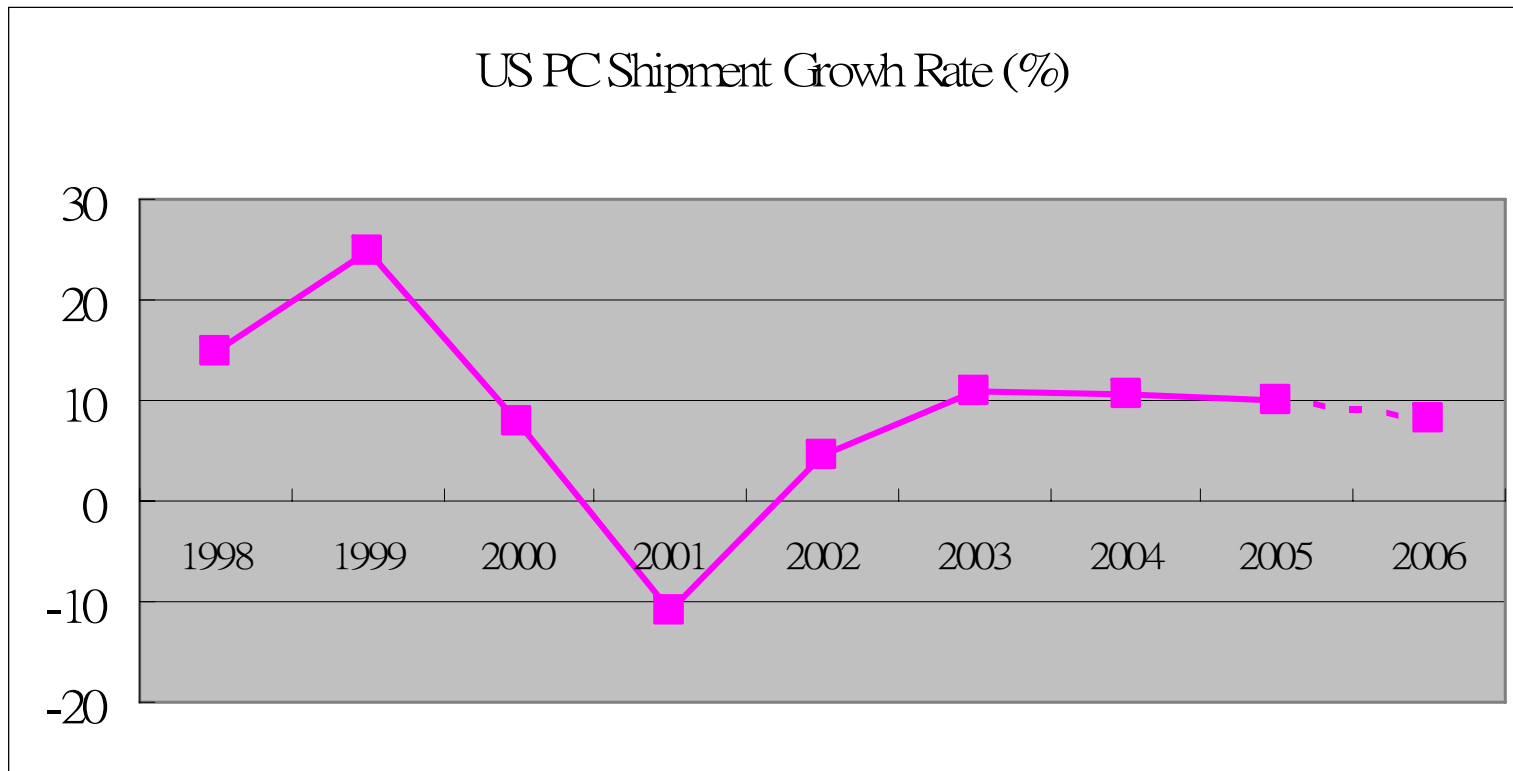




Industry Outlook



❖ US PC market perks up



Source: IDC

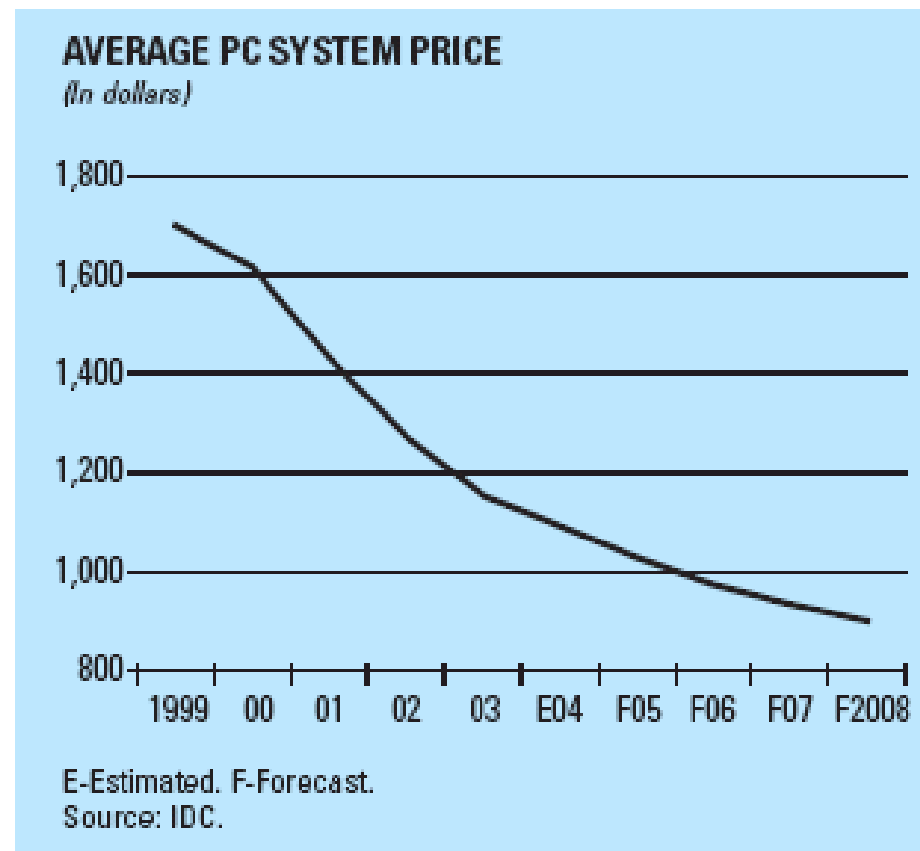




Industry Outlook



❖ Competitive pricing everywhere

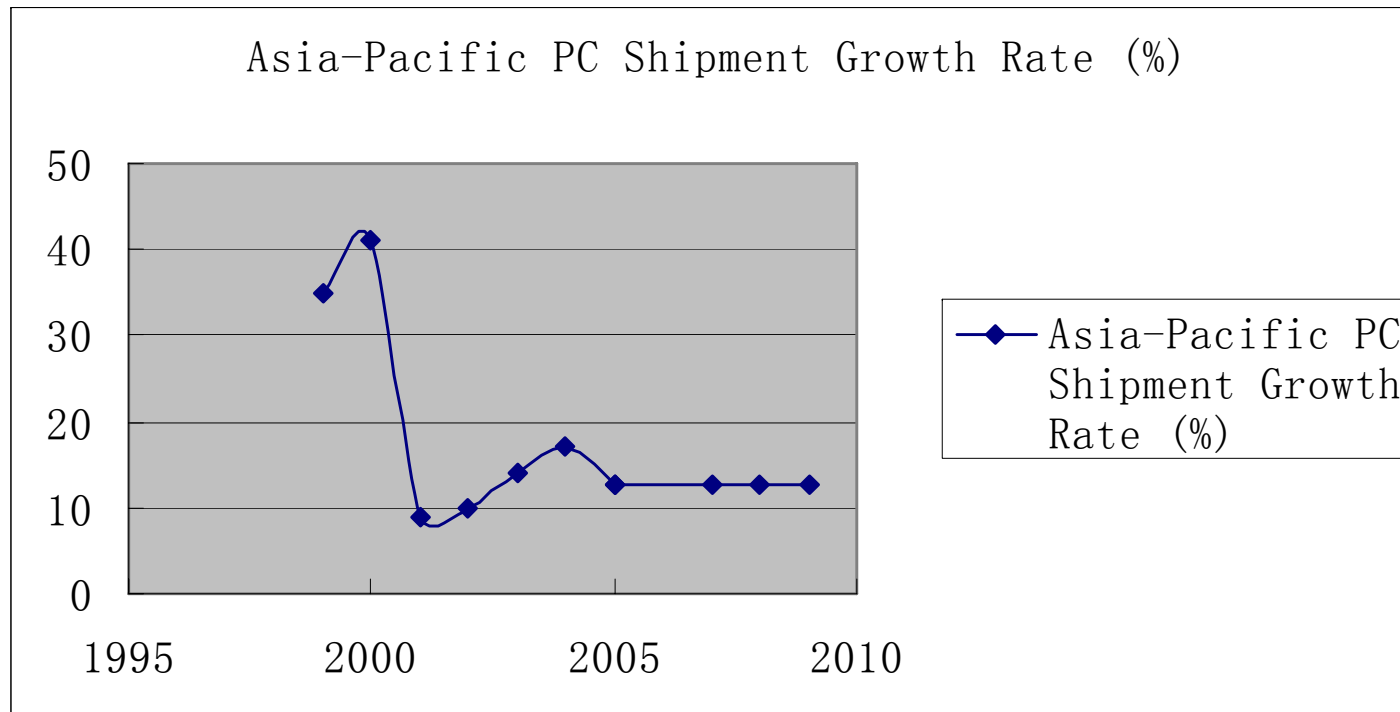




Industry Outlook



- ❖ International markets offer long-term growth
- Asia-Pacific Region (excluding Japan)



Source: IDC





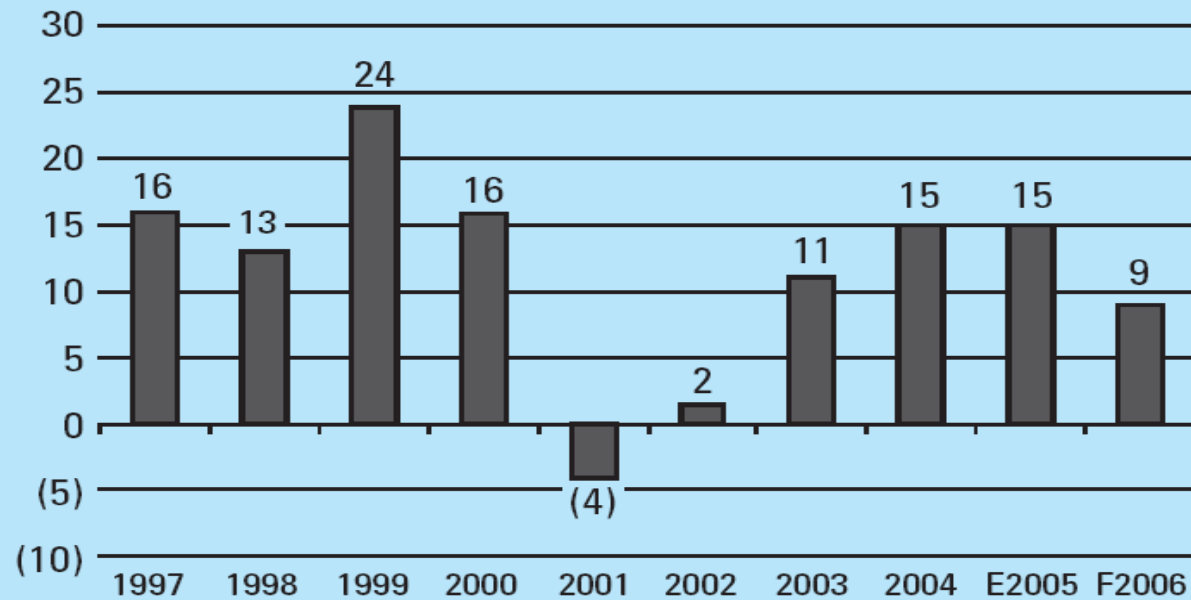
Industry Outlook



PC Biz Cycle

WORLDWIDE PC SHIPMENT GROWTH

(In percent, based on units shipped)



E-Estimated. F-Forecast.

Sources: IDC; Standard & Poor's estimates.





Industry financial browser



Industry browser

Description	Personal Computers
P/E	37
ROE %	26.8
Price to Book	9.86
Net Profit Margin (mrq)	5.7
Price To Free Cash Flow (mrq)	20.9





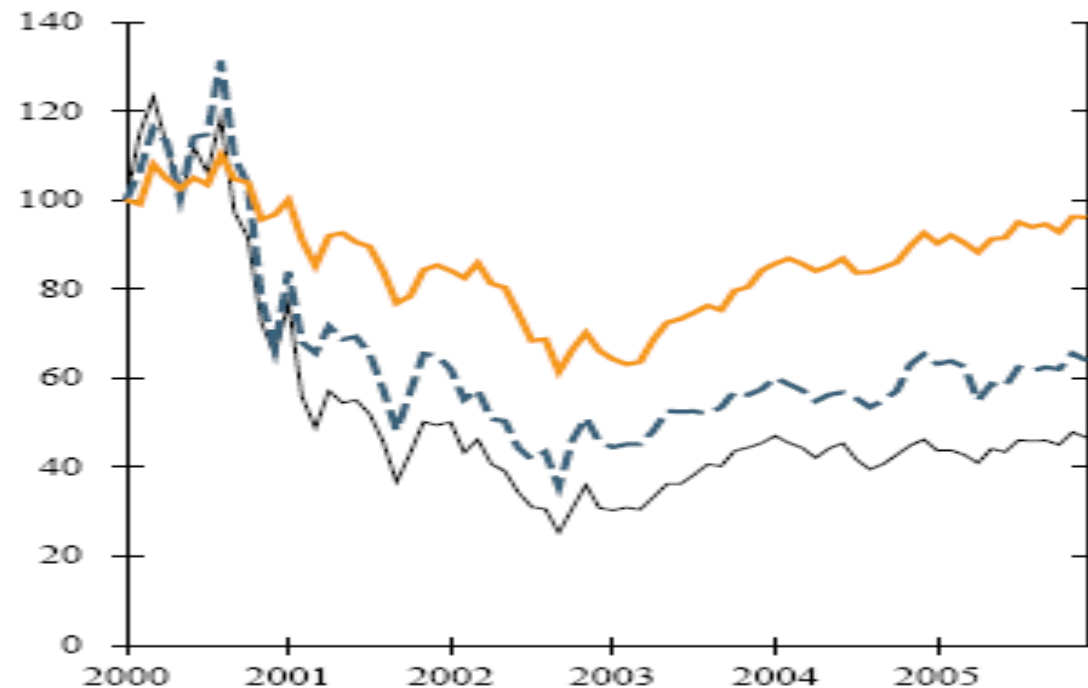
Market performance



GICS Sector: Information Technology
Sub-Industry: Computer Hardware

Based on S&P 1500 Indexes

Month-end Price Performance as of 01/31/06



Sub-Industry

Sector

S&P 1500

Note: All Sector & Sub-Industry Information is based on the Global Industry Classification Standard (GICS)





PC Industry

Key Financial Statistics (TTM)



Valuation		Profitability	
P/E	37.00	Gross Margin	20.90%
P/B	9.91	EBIT Margin	8.50%
P/S	2.04	Net Profit Margin	5.70%
P/FC	21.50	EPS	0.73

Management Effectiveness		Financial Strength	
ROE	26.80%	Quick Ratio	1.3
ROA	10.40%	Current Ratio	1.5
ROI	25.40%	LT Debt/Equity	0.06
		Total Debt/Equity	0.06

source: [www. CoreReference.com](http://www.CoreReference.com)



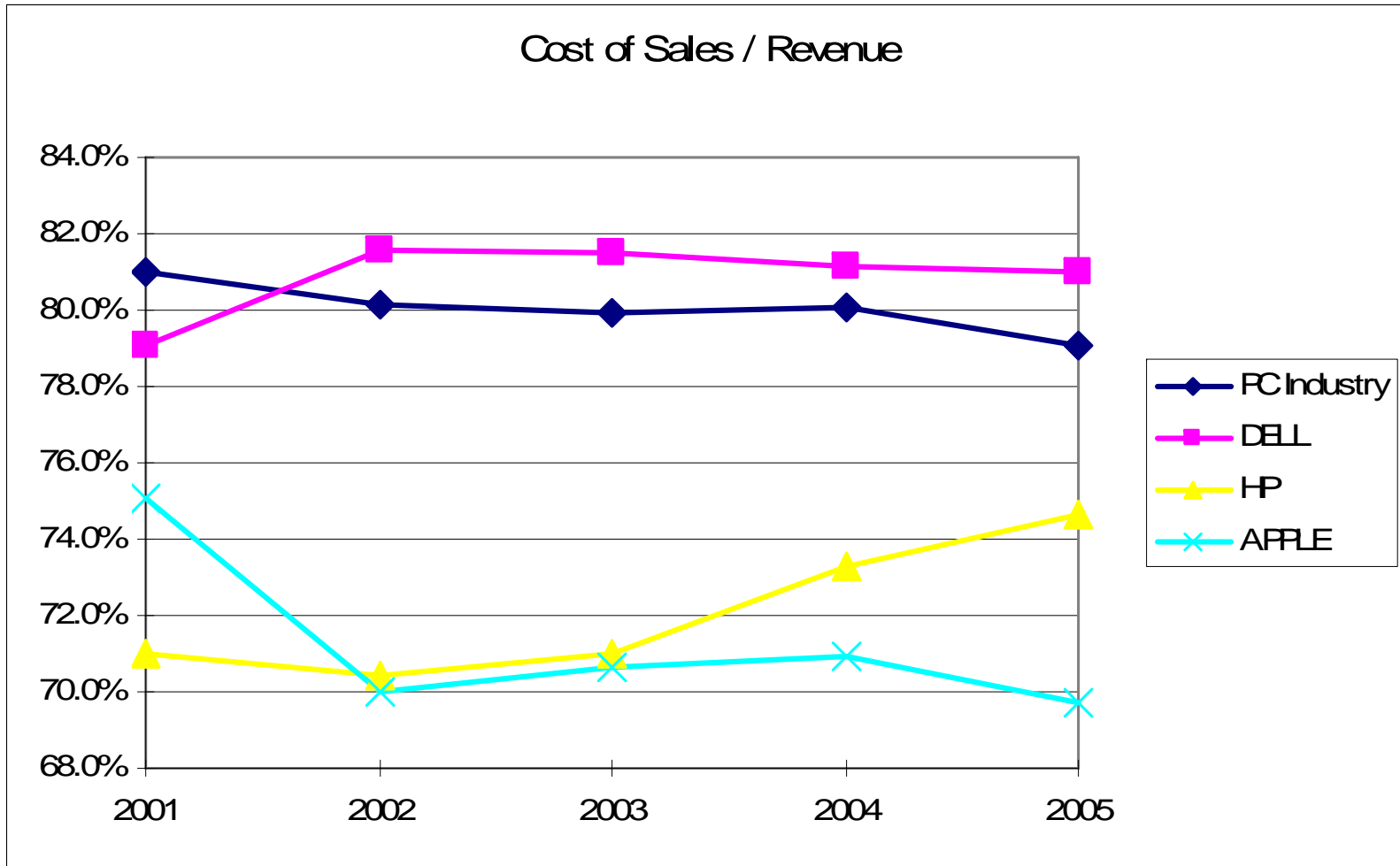


PC Industry Index vs NASDAQ



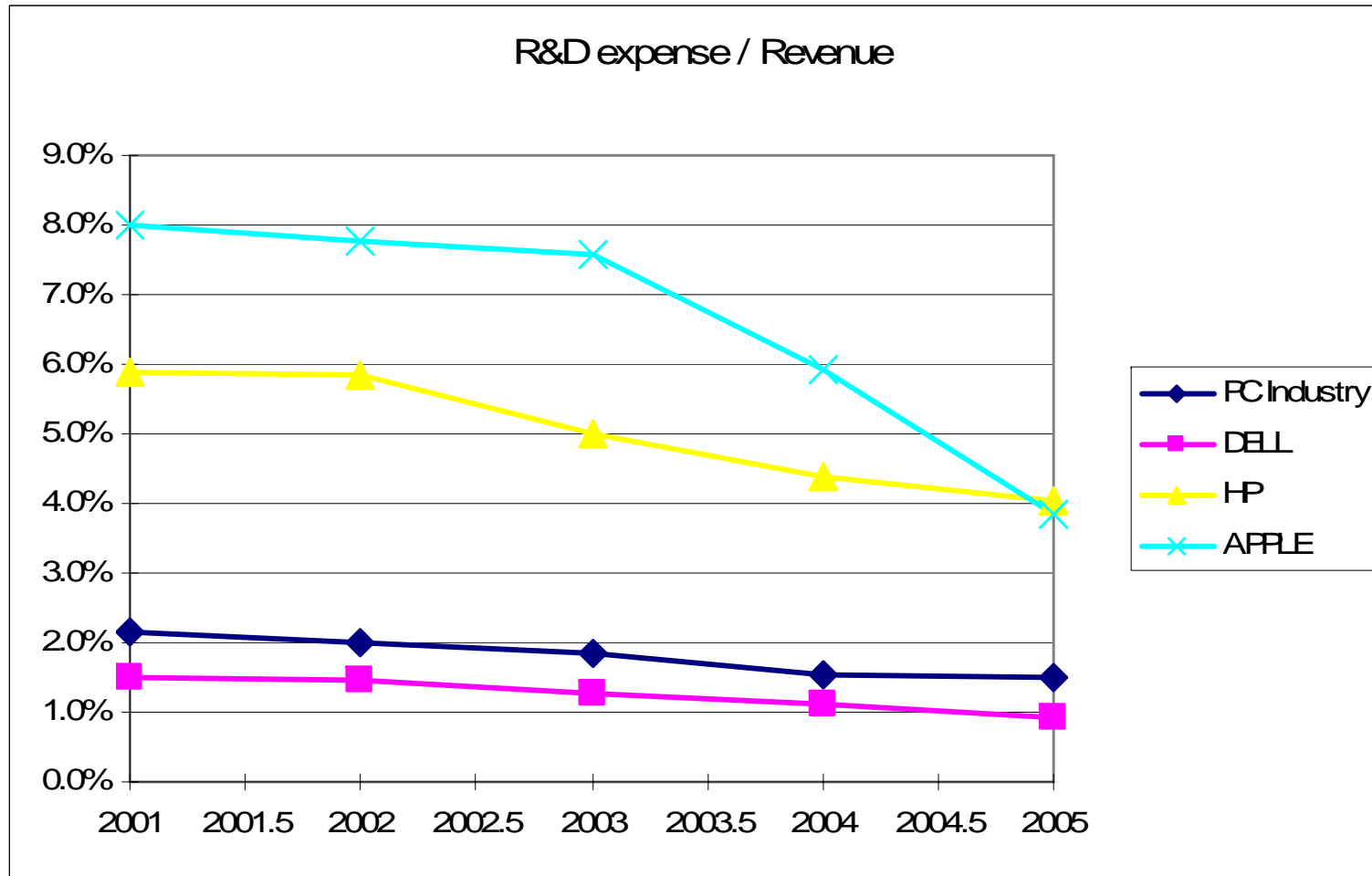


Financial Analysis



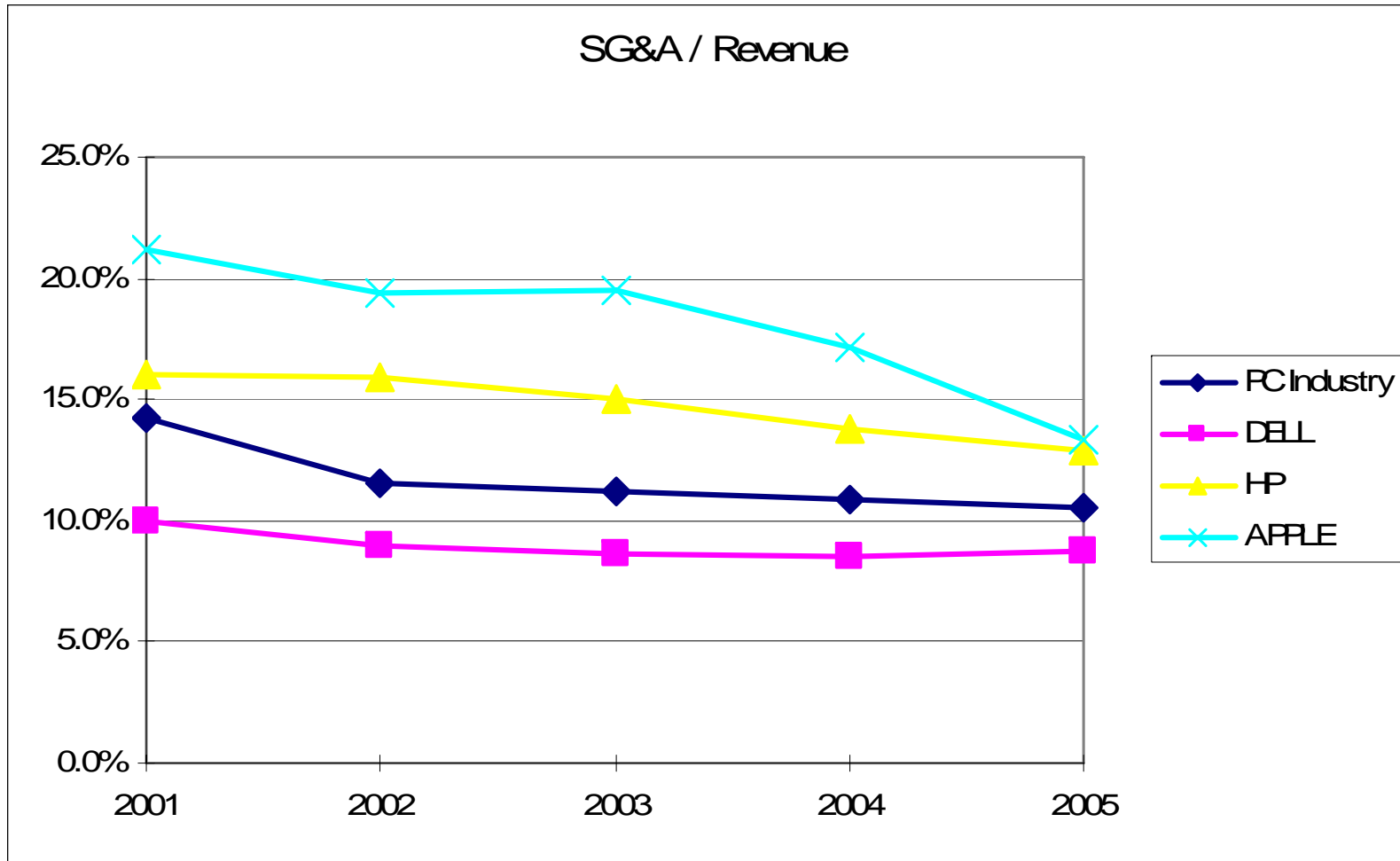


Financial Analysis



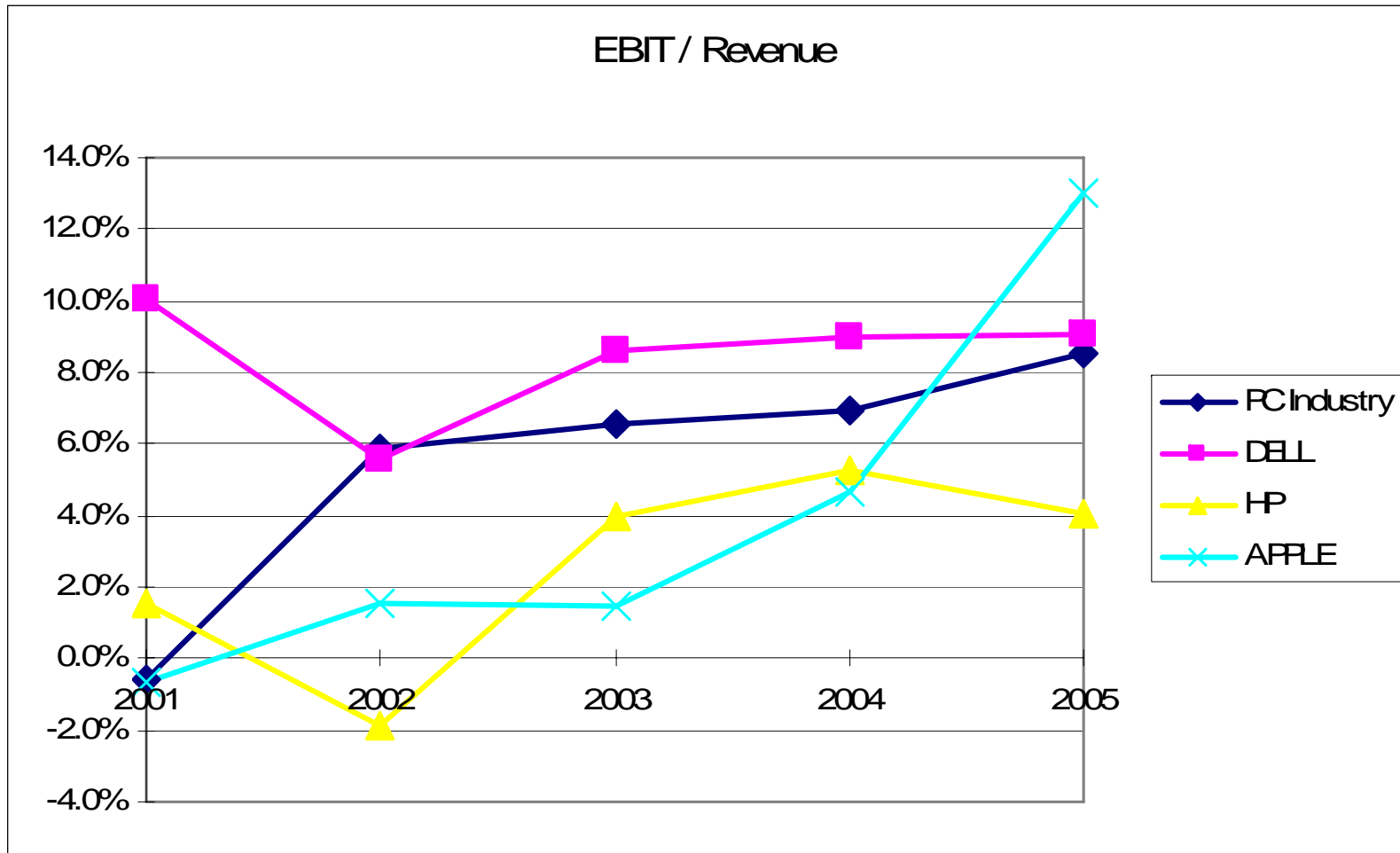


Financial Analysis



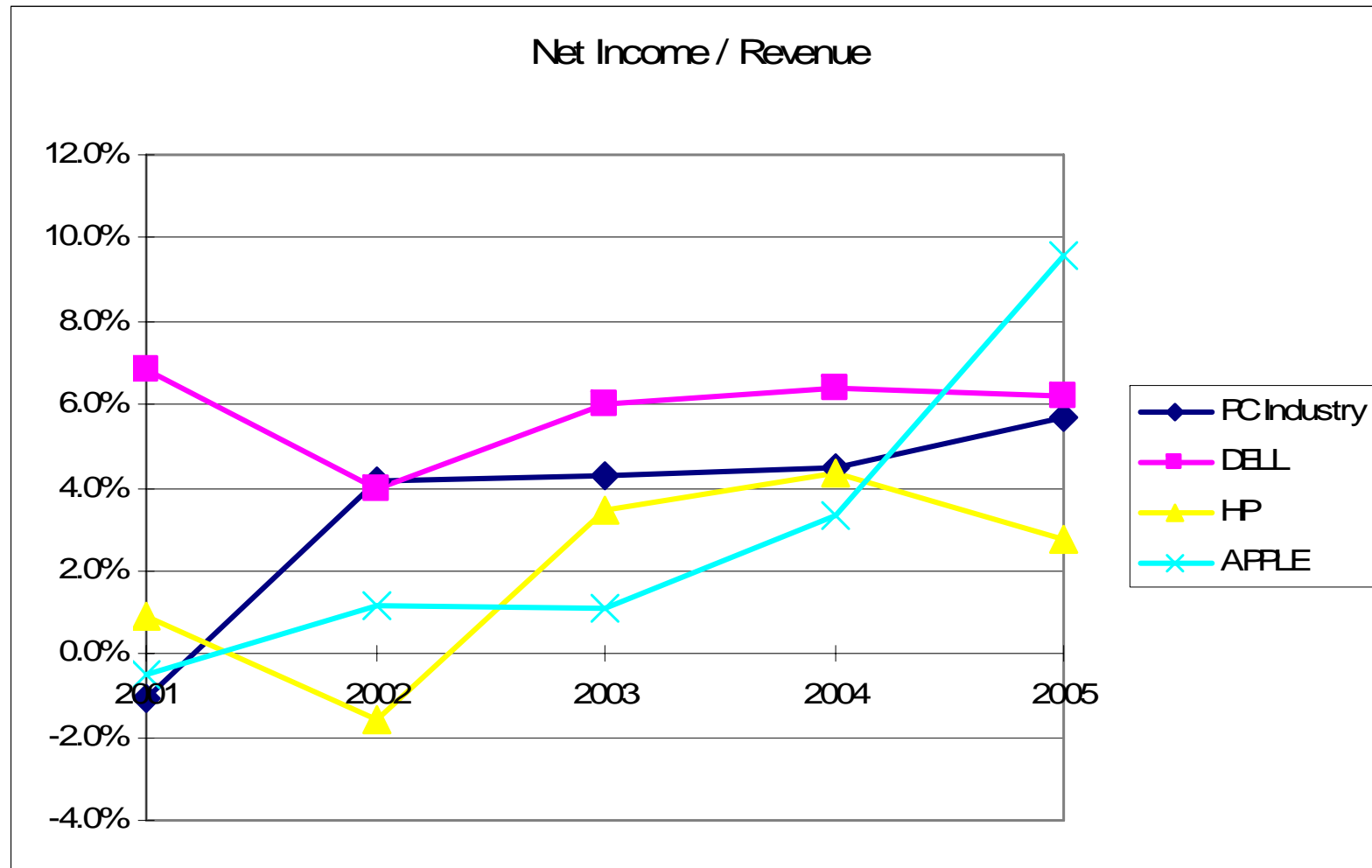


Financial Analysis





Financial Analysis





DRELL

Yong Soo Kim



History



- ❖ Michael Dell founded the company as Dell Computers in 1984, in Texas
- ❖ IPO in 1989
- ❖ The first notebook computer launching in 1991
- ❖ In 2004, new technology agreements with Fuji Xerox, Kodak, and Samsung. And strategic partnership with Oracle
- ❖ Strategic development partnership with MS in 2004
- ❖ Strategic development partnership with Google in 2006





Product line

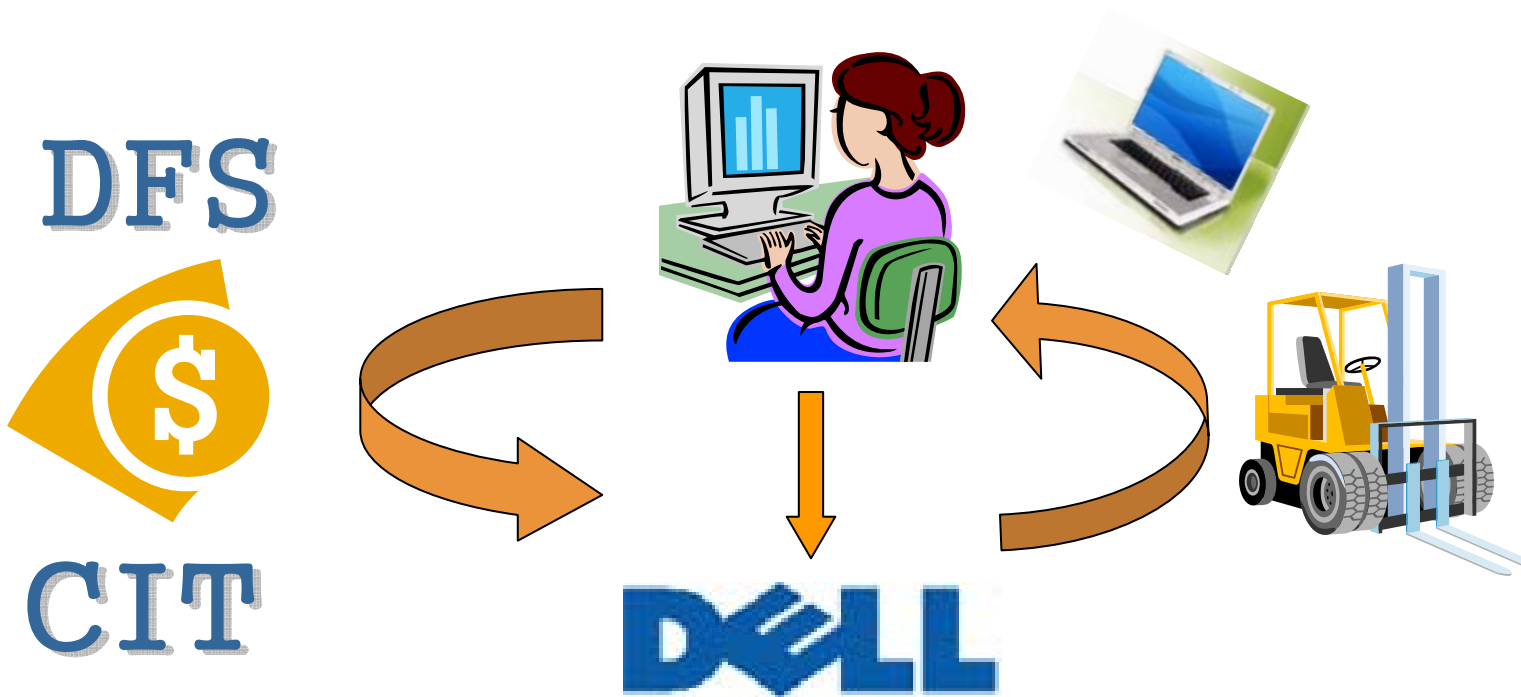


Products	
Servers	PowerEdge™
Storage	Dell/EMC and PowerVault™
Workstations	Precision™
Networking Products	PowerConnect™
Notebook Computers	Latitude™, Inspiron™
Desktop Computer Systems	OptiPlex™, Dimension™
Printing and Imaging Systems	Ink, Toner management system™
Software and Peripherals	LCD, Accessories
Services	
Financial Services	DFS, CIT





Selling Process





Management



Kevin B. Rollins
President and CEO

- 53
- VP and partner of Bain & Company
- The request of the President of the US on the Advisory Committee for Trade Policy and Negotiation



Michael S. Dell
Chairman of the Board

- 41
- The US President's Council of Advisors on Science and Technology





Business Strategy



- ❖ **Direct customer relationship**
 - The most efficient path to the customer
 - “Direct business model”, eliminates wholesale and retail dealers that add unnecessary time and cost or diminish Dell’s understanding of customer expectations
- ❖ **Custom-built products and custom-tailored services**
 - The most effective model for providing solutions that address customer needs
 - Dell’s flexible, build-to-order manufacturing process enables Dell to turn over inventory every four days on average, and reduce inventory levels





Business Strategy(2)



❖ The **low-cost leader**

- Highly efficient supply chain management and manufacturing organization
- Dell's relentless focus on reducing its costs allows it to consistently provide customers with superior value

❖ Non-proprietary **standards-based** technologies

- Focusing on standards gives customers the benefits of extensive research and development
- Unlike proprietary technologies, standards provide customers with flexibility and choice





Why Dell?



❖ Notable clientele

- Six leading US banks and 10 of the largest state governments.
- Major clients : Oxford University, Barclays, WH Smith, NTT DoCoMo, Pioneer Corporation, Petrochina Company, China Telecom, Alcan, Cargill, Southwest Airlines Company, Honeywell and Verizon Communications





Why Dell?



- ❖ Entering new markets through partnerships
 - Three main product areas where it believes growth and profitability are attractive: consumer electronics, storage, and printers.
 - In printers, Dell opted to partner with Lexmark and more recently Fuji Xerox, Kodak, and Samsung.
 - In storage, Dell has partnered with EMC to deliver its midrange SAN product, Clariion, which is aimed at small and medium-sized businesses.
 - In the consumer electronics segment, Dell has delivered a host of new products including Axim handheld, Dell Music Store, and LCD-TVs.





Risks



- ❖ Disruptions in component availability
 - Dell's financial success in recent periods has been due in part to its supply chain management practices, including its ability to achieve rapid inventory turns
- ❖ Reliance on suppliers
 - Dell's manufacturing process requires a high volume of quality components that are procured from third-party suppliers
- ❖ Loss of government contracts





Company Financials



Per Share Data(\$)

(Year Ended January 31)

	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Tangible Book Value	2.61	2.46	1.89	1.80	2.16	1.94	0.91	0.50	0.29	0.32
Cash Flow	1.32	1.11	0.88	0.54	0.90	0.67	0.56	0.34	0.19	0.10
Earnings	1.18	1.01	0.80	0.46	0.81	0.61	0.53	0.32	0.17	0.08
Dividends	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Payout Ratio	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Calendar Yrs.	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
Prices-High	42.57	37.18	31.06	31.32	59.68	55.00	37.90	12.98	4.02	1.54
-Low	31.14	22.59	21.90	16.01	16.25	31.37	9.92	3.11	0.71	0.61
P/E Ratio-High	36	37	39	68	74	90	73	41	23	18
-Low	26	22	27	35	20	51	19	10	4	7





Company Financials



I/S Analysis (Million \$) (Year Ended January 31)

	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Revenue	49,205	41,444	35,404	31,168	31,888	25,265	18,243	12,327	7,759	5,296
Operating Income	4,588	3,807	3,055	2,510	3,008	2,419	2,149	1,383	761	415
Depreciation	334	263	211	239	240	156	103	67	47	38
Interest Expense	16	14	17	29	47	34	Nil	3	7	15
Pretax Income	4,445	3,724	3,027	1,731	3,194	2,451	2,084	1,368	747	383
Effective Tax Rate	31.5%	29.0%	29.9%	28.0%	30.0%	32.0%	29.9%	31.0%	28.9%	28.9%
Net Income	3,043	2,645	2,122	1,246	2,236	1,666	1,460	944	531	272

B/S & Others (Million \$) (Year Ended January 31)

	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Cash	4,747	4,317	4,232	3,641	4,910	3,809	3,181	1,844	1,352	646
Current Assets	16,897	10,633	8,924	7,877	9,491	7,681	6,339	3,912	2,747	1,957
Total Assets	23,215	19,311	15,470	13,535	13,435	11,471	6,877	4,268	2,993	2,148
Current Liabilities	14,136	10,896	8,933	7,519	6,543	5,192	3,695	2,697	1,658	939
LT Debt	505	505	506	520	509	508	512	17	18	113
Common Equity	6,485	6,280	4,873	4,694	5,622	5,308	2,321	1,293	806	967
Total Cap.	6,990	6,785	5,379	5,214	6,131	5,816	2,833	1,310	824	1,080
Capital Exp.	525	329	305	303	482	397	296	187	114	101
Cash Flow	3,377	2,908	2,333	1,485	2,476	1,822	1,563	1,011	578	310
Current Ratio	1.2	1.0	1.0	1.0	1.5	1.5	1.7	1.5	1.7	2.1
% LT Debt of Cap.	7.2	7.4	9.4	10.0	8.3	8.7	18.1	1.3	2.2	10.5
% Net Inc. of Revenues	6.2	6.4	6.0	4.0	7.0	6.6	8.0	7.7	6.8	5.1
% Return on Assets	14.3	15.2	14.6	9.2	18.0	18.2	26.2	26.0	20.7	14.5
% Return on Equity	47.7	47.4	44.4	24.2	40.9	43.7	80.8	89.9	59.9	36.3

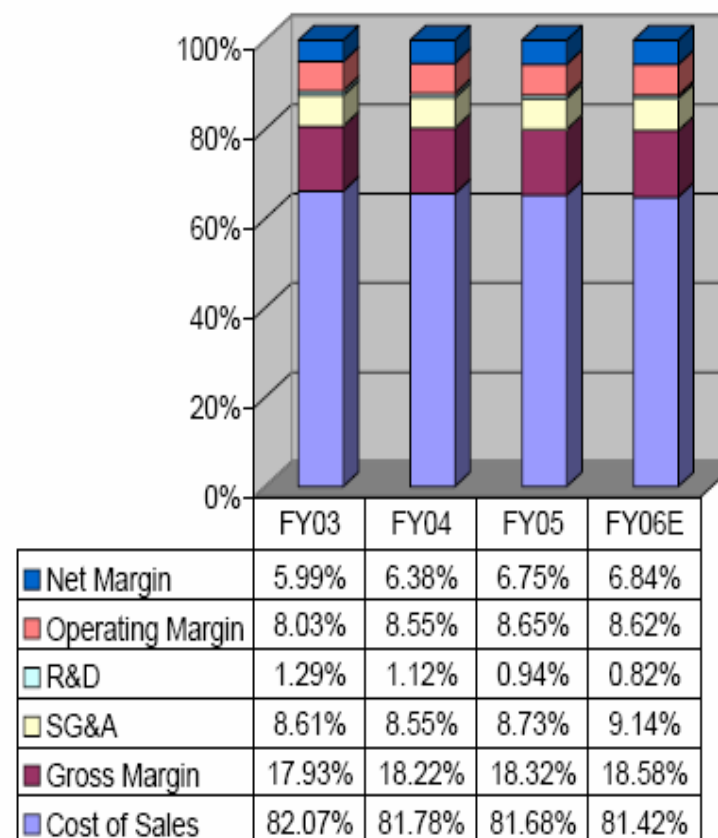




Income Statement



FY Ending: Jan. Numbers in \$ Million	FY03	FY04	FY05	FY06E
Net Sales	35,404	41,444	49,205	55,525
Cost of Sales	29,055	33,892	40,190	45,208
Gross Profit	6,349	7,552	9,015	10,317
SG&A	3,050	3,544	4,298	5,074
R&D	455	464	463	456
Total Operation expense	3,505	4,008	4,761	5,531
Operating Income	2,844	3,544	4,254	4,786
Interest Income	183	180	191	230
Pre-tax Income	3,027	3,724	4,445	5,016
Taxes	905	1,079	1,122	1,216
Net Income	2,122	2,645	3,323	3,800
EPS	0.8	1.01	1.29	1.55
Shares	2,644	2,619	2,567	2,458

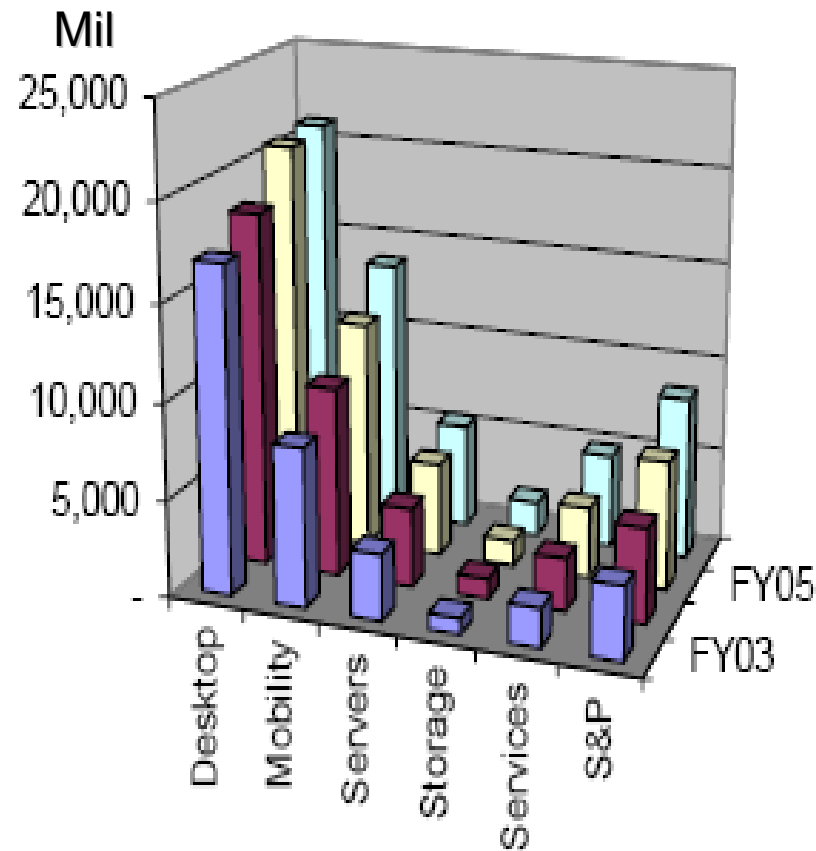




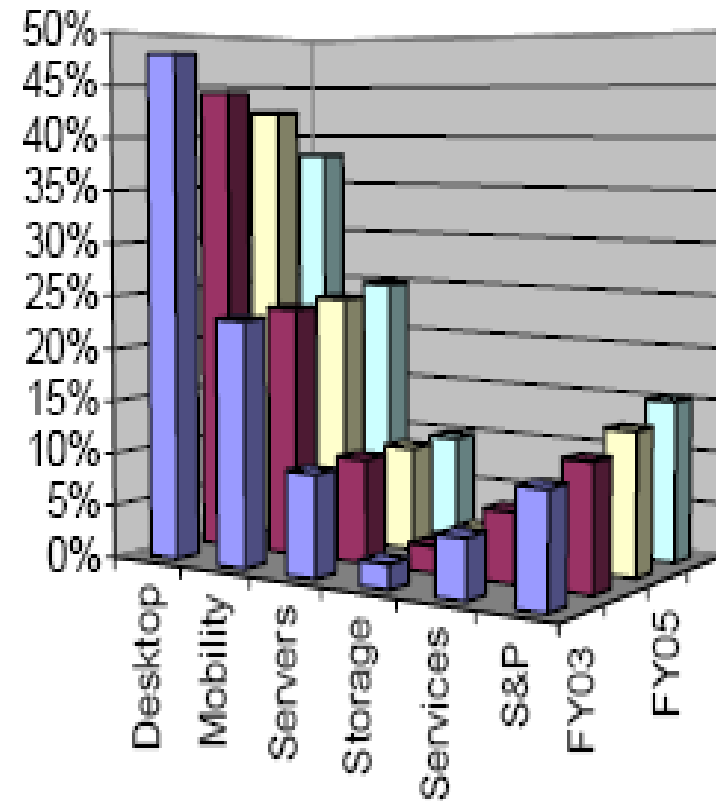
Net revenue by product



Net revenue

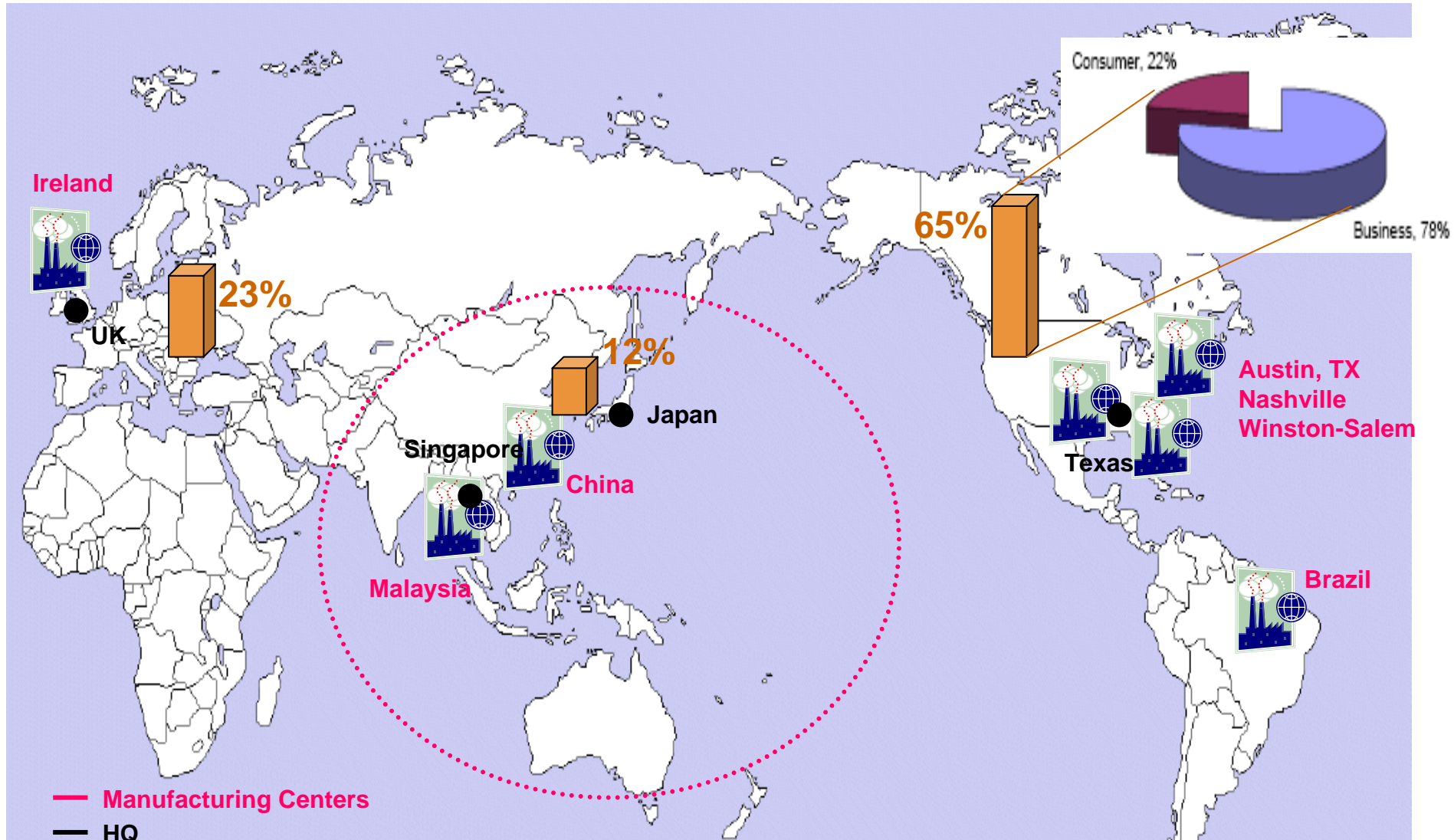


Net revenue %





Regional Breakdown





Segment information



\$ Millions	FY03	FY04	FY05	FY06E
Americas	\$25,163	\$28,603	\$32,940	\$36,199
% Total Revenue	71%	69%	67%	65%
Operating Income	\$2,253	\$2,594	\$2,978	\$3,449
Operating Margin	9.00%	9.10%	9.00%	9.50%
US Business	\$19,394	\$21,888	\$25,339	\$28,256
Operating Income	\$1,945	\$2,194	\$2,579	\$3,006
Operating Margin	10.00%	10.00%	10.20%	10.60%
US Consumer	\$5,769	\$6,715	\$7,601	\$7,943
Operating Income	\$308	\$400	\$399	\$442
Operating Margin	5.30%	6.00%	5.20%	5.60%
Europe	6,912	8,495	\$10,787	\$12,687
% Total Revenue	20%	20%	22%	23%
Operating Income	\$388	\$637	\$818	\$832
Operating Margin	5.60%	7.50%	7.60%	6.60%
Asia Pacific/Japan	3,445	4,346	\$5,478	\$6,639
% Total Revenue	10%	10%	11%	12%
Operating Income	\$203	\$313	\$458	\$506
Operating Margin	5.90%	7.20%	8.40%	7.60%
Total Revenue	\$35,404	\$41,444	\$49,205	\$55,525
Y/Y Change	14%	17%	19%	13%





Balance Sheet

Source : Company & Credit Suisse



FY Ending: Jan. Numbers in \$000	2005 Quarterly Results						2006 Quarterly Results				
	4Q03 Jan-03	4Q04 Jan-04	1Q05 Apr-04	2Q05 Jul-04	3Q05 Oct-04	4Q05 Jan-05	1Q06 Apr-05	2Q06 Jul-05	3Q06 Oct-05	4Q06E Jan-06	4Q07E Jan-07
Cash and Securities	\$4,638,000	\$5,152,000	\$5,255,000	\$5,534,000	\$7,494,000	\$9,807,000	\$9,841,000	\$9,046,000	\$9,281,000	\$9,176,325	\$7,390,987
Accounts Receivable	2,586,000	3,635,000	3,424,000	3,625,000	4,167,000	4,414,000	4,289,000	4,443,000	4,860,000	5,190,137	5,967,123
Inventories	306,000	327,000	425,000	418,000	415,000	459,000	483,000	570,000	582,000	608,057	662,961
Other Current Assets	1,394,000	1,519,000	2,073,000	2,055,000	2,124,000	2,217,000	2,439,000	2,739,000	2,841,000	2,850,000	3,050,000
Total Current Assets	8,924,000	10,633,000	11,177,000	11,632,000	14,200,000	16,897,000	17,052,000	16,798,000	17,564,000	17,824,519	17,071,072
Property, Plant, Equipment	913,000	1,517,000	1,510,000	1,578,000	1,627,000	1,691,000	1,741,000	1,843,000	1,895,000	2,013,000	2,290,000
Other Noncurrent Assets	5,633,000	7,161,000	7,022,000	6,722,000	5,227,000	4,627,000	3,894,000	3,970,000	3,415,000	3,365,000	3,065,000
TOTAL ASSETS	\$15,470,000	\$19,311,000	\$19,709,000	\$19,932,000	\$21,054,000	\$23,215,000	\$22,687,000	\$22,611,000	\$22,874,000	\$23,202,519	\$22,426,072
Accounts Payable	5,989,000	7,316,000	7,518,000	7,444,000	8,067,000	8,895,000	9,057,000	9,196,000	9,376,000	10,178,345	11,491,323
Other	2,944,000	3,580,000	3,803,000	3,877,000	4,707,000	5,241,000	5,332,000	5,172,000	5,871,000	5,921,000	6,121,000
Current Liabilities	8,933,000	10,896,000	11,321,000	11,321,000	12,774,000	14,136,000	14,389,000	14,368,000	15,247,000	16,099,345	17,612,323
Noncurrent Liabilities	1,158,000	1,630,000	1,778,000	1,899,000	1,895,000	2,089,000	2,170,000	2,230,000	2,302,000	2,245,000	1,945,000
Long Term Debt	506,000	505,000	505,000	505,000	505,000	505,000	504,000	504,000	504,000	500,000	500,000
Shareholders' Equity	4,873,000	6,280,000	6,105,000	6,207,000	5,880,000	6,485,000	5,624,000	5,509,000	4,821,000	4,358,174	2,368,748
TOTAL LIABILITIES & EQUITY	\$15,470,000	\$19,311,000	\$19,709,000	\$19,932,000	\$21,054,000	\$23,215,000	\$22,687,000	\$22,611,000	\$22,874,000	\$23,202,519	\$22,426,072
Current Ratio	1.0	1.0	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.1	1.0
Receivable Turnover	14.8	13.6	13.5	12.9	12.0	12.2	12.5	12.1	11.4	11.4	11.1
Inventory Turnover	103.8	110	89.1	91.6	98.2	95.5	90.2	76.7	77.8	79.3	81.1
Payables Turnover	5.3	5.3	5.0	5.1	5.1	4.9	4.8	4.8	4.8	4.7	4.7
Average Asset Turnover	2.4	2.4	2.5	2.5	2.4	2.3	2.4	2.5	2.5	2.4	2.7
Return on Average Assets	14.60%	15.20%	15.70%	16.20%	16.00%	15.60%	16.60%	17.20%	17.10%	16.40%	18.20%
Return on Average Equity	44.40%	47.40%	49.70%	50.50%	53.20%	52.10%	60.10%	62.50%	70.30%	70.10%	123.70%
Debt as % Total Capital	9.40%	7.40%	7.60%	7.50%	7.90%	7.20%	8.20%	8.40%	9.50%	10.30%	17.40%
Book Value per share	\$1.86	\$2.40	\$2.35	\$2.41	\$2.31	\$2.54	\$2.24	\$2.22	\$1.98	\$1.81	\$1.03
Cash per Share	\$1.77	\$1.97	\$2.03	\$2.15	\$2.94	\$3.84	\$3.91	\$3.65	\$3.81	\$3.82	\$3.21



Cash Flow

Source : Company & Credit Suisse



FY Ending: Jan. Numbers in \$ millions	2006 Quarterly Results								2007 Quarterly Results				
	FY03	FY04	FY05	1Q06 Apr-05	2Q06 Jul-05	3Q06 Oct-05	4Q06E Jan-06	FY06E	1Q07E Apr-06	2Q07E Jul-06	3Q07E Oct-06	4Q07E Jan-07	FY07E
Cash flows from operating activities:													
Income	2,122	2,645	731	799	846	667	3,043	934	1,020	606	987	3,547	4,161
Adjustments:													
Depreciation/Amortization	211	263	82	79	82	91	334	91	97	98	102	388	423
Tax Benefits of Employee Stock Plans	260	181	25	45	40	139	249	32	91	30	30	183	0
Other, net	-477	-564	-112	-51	-85	-276	-524	-62	137	53	0	128	0
Changes in:													
Operating Working Capital	1,210	872	81	-270	915	1,029	1,755	103	-550	247	446	246	481
Non-current Assets & Liabilities	212	273	195	101	-11	168	453	92	124	114	0	0	0
Net cash provided by operations	3,538	3,670	1,002	703	1,787	1,818	5,310	1,190	919	1,148	1,565	4,492	5,065
Cash flows from investing activities:													
Capital Expenditures	-305	-329	-82	-134	-139	-170	-525	-143	-204	-160	-220	-727	-700
Purchases of Marketable Securities	-8,736	-12,099	-3,505	-3,214	-2,765	-2,777	-12,261	-869	-2,144	-1,749	0	-4,762	0
Proceeds from Maturities/Sales of Securities	7,660	10,078	3,264	3,221	2,692	1,292	10,469	2,726	3,344	2,623	0	8,693	0
Purchase of assets held in master lease facilities	0	-636	0	0	0	0	0	0	0	0	0	0	0
Cash assumed in consolidation of DFS	0	172	0	0	0	0	0	0	0	0	0	0	0
Net cash used in investing	-1,381	-2,814	-323	-127	-212	-1,655	-2,317	1,714	996	714	-220	3,204	-700
Cash flow from financing activities:													
Purchase of Common Stock	-2,290	-2,000	-1,131	-891	-1,327	-870	-4,219	-2,000	-1,800	-1,450	-1,700	-6,950	-7,000
Issuance of Common Stock	265	628	114	196	154	644	1,091	161	466	146	250	1,023	850
Other	0	-11	0	0	-17	0	0	0	0	0	0	0	0
Net cash provided by financing	-2,025	-1,383	-1,017	-695	-1,190	-226	-3,128	-1,839	-1,334	-1,304	-1,450	-5,927	-6,150
Effect of Exchange Rates	459	612	96	69	115	285	565	62	-118	-54	0	-110	0
Net (dec)inc in cash and cash equivalents	591	85	-242	-50	500	222	430	1,127	463	504	-105	1,659	-1,785
Cash and cash equivalents at beg of period	3,641	4,232	4,317	4,075	4,025	4,525	4,317	4,747	5,874	6,337	6,841	4,747	6,406
Cash and cash equivalents at end of period	4,232	4,317	4,075	4,025	4,525	4,747	4,747	5,874	6,337	6,841	6,736	6,406	4,621



Valuation



DCF Valuation Summary

Operating Value	63,319,516
ST investment	2,385,845
Entity Value	<u>65,705,360</u>
Debt	500,000
Capitalized Operating Lease	205,000
Equity Value	<u>65,000,360</u>
Most Recent Share Outstanding	2,435,000
Value per Share	27
Most Recent Close Price	29.69
Value Difference	11.22%

Free Cash Flow

	FreeCashFlow	DiscountFactor (WACC=10%)	PV
2007	4,364,574	0.9091	3,967,795
2008	4,572,075	0.8264	3,778,574
2009	4,748,254	0.7513	3,567,434
2010	4,868,000	0.6830	3,324,909
2011	4,937,811	0.6209	3,065,992
Continuing Value (g=3%)	72,656,367	0.6209	45,113,887
Operating Value			62,818,591
Mid-Year Adj Factor			<u>1.0080</u>
Operating Value (Discounted)			<u>63,319,516</u>





Target Price



Sensitivity Analysis

	P/E	P/CF	P/B
Past 4 yrs	22.37 – 68.09x	20.35 – 58.00x	8.89-17.40x
2007(F)	1.71	1.79	0.97
Target Price band	\$38-116	\$36.4-103.8	\$8.6-16.9

DCF Analysis

PV of forecasted Equity(\$ 000)	65,000,360
Most Recent Share Outstanding	2,435,000
WACC	10%
Target Price band <Terminal Growth rate(3.0%~4.0%)>	\$27 - 30





Recommendation



BUY

Buying Price : 27

Selling Point : It depends on Bush!!!





HEWLETT-PACKARD CO.



Jeff Wang





Stock Snapshot



HEWLETT-PACKARD (NYSE: HPQ)

Last Trade	34.19	Day's Range	33.65-34.20
Trade Time	Mar 2	52 wk Range	19.57-34.52
Change	+ 0.14 (0.41%)	Volume	11,826,000
Prev Close	34.05	Avg Vol (3m)	13,860,800
Open	34.00	Market Cap	97.02B
Bid	N/A	P/E (ttm)	36.96
Ask	N/A	EPS (ttm)	0.93
1 y Target Est*	33.82	Div& Yield	0.32 (0.90%)

Source: Yahoo. Finance

Note: * estimated by Yahoo





HP' s Profile



A leading global provider of products, technologies , solutions and services

History



- Founded by William R. Hewlett & David Packard in 1939 in Palo Alto
- First Product: an audio oscillator
- First major customer: Walter Disney
- Incorporated in 1947

Offerings

- Enterprise storage and servers
- Multi-vender services: technology support & maintenance
- Consulting, integration and managed services
- Personal computing and other access devices
- Imaging and printing-related products and service

Customers

Individual consumers; small and medium sized businesses; large enterprises





Business Segments



- ❖ *Enterprise Storage and Servers (ESS)*
 - Industry Stand servers, Business Critical Servers
- ❖ *HP Services (HPS)*
 - Technology Services, Consulting and Integration, Managed services
- ❖ *Software*
 - Management Software Solutions
- ❖ *Personal System Group (PSG)*
 - Commercial PCs, Consumer PCs, Workstations, Handheld Computing, Digital Entertainment
- ❖ *Imaging and Print Group (IPG)*
 - Inject Printers, LaserJet Printers, Digital Photography and Entertainment, Graphics and Imaging, Printer Supplies
- ❖ *HP Financial Services (HPFS)*
 - Leasing, Financing, Utility Programs and Asset Recovery Services
- ❖ *Corporate Investments*
 - HP Labs, Business Incubation Projects

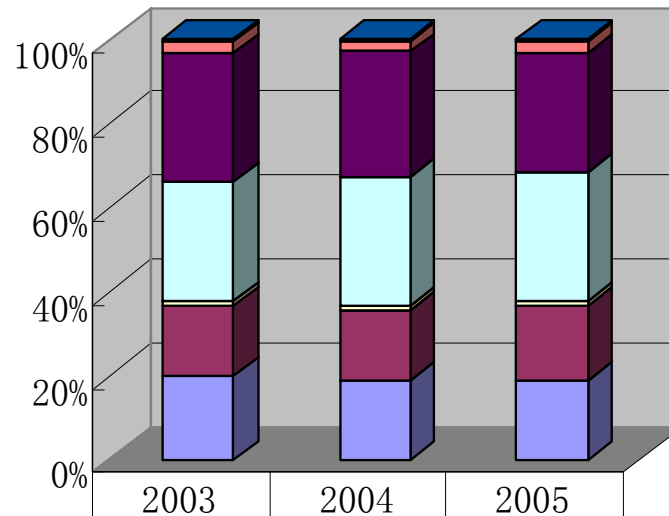




Business Segments

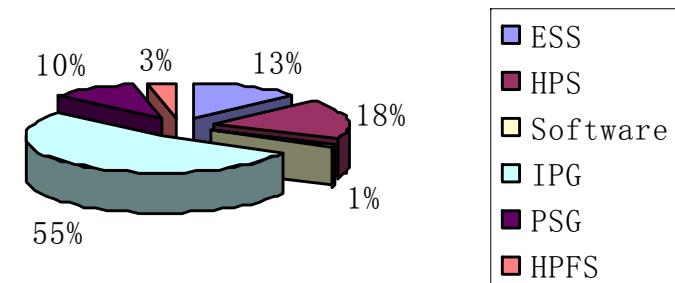


Each segment % of Total Net Revenue



	2003	2004	2005
Cor. Investment	0.47%	0.55%	0.60%
HPFS	2.60%	2.34%	2.39%
IPG	30.59%	29.87%	28.64%
PSG	28.75%	30.39%	30.44%
Softwares	1.06%	1.15%	1.23%
HPS	16.81%	17.09%	17.69%
ESS	19.71%	18.61%	19.01%

2005 Each Segment % of Operating Earnings



**Core Businesses:
IPG, HPS, ESS, PSG**

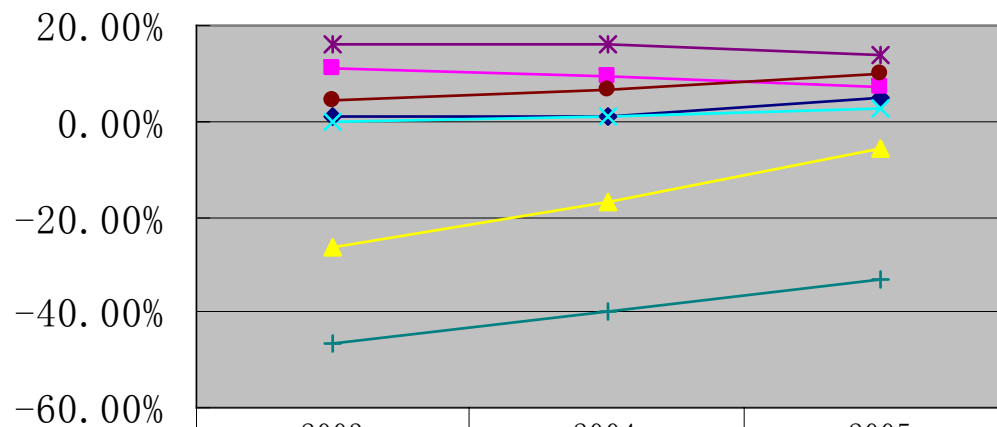




Business segments

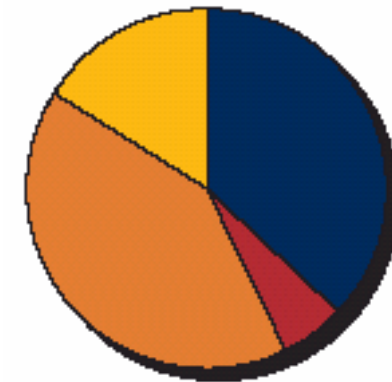


Operating Margin of Segments



Segment	2003	2004	2005
ESS	1.00%	1.06%	4.85%
HPS	11.03%	9.26%	7.41%
Softwares	-26.30%	-16.70%	-5.48%
PSG	0.08%	0.83%	2.46%
IPG	15.90%	15.88%	13.58%
HPFS	4.11%	6.60%	10.13%
Cor. Investment	-46.67%	-39.87%	-33.27%

Revenue overview by region
[% of total, fiscal year 2004]



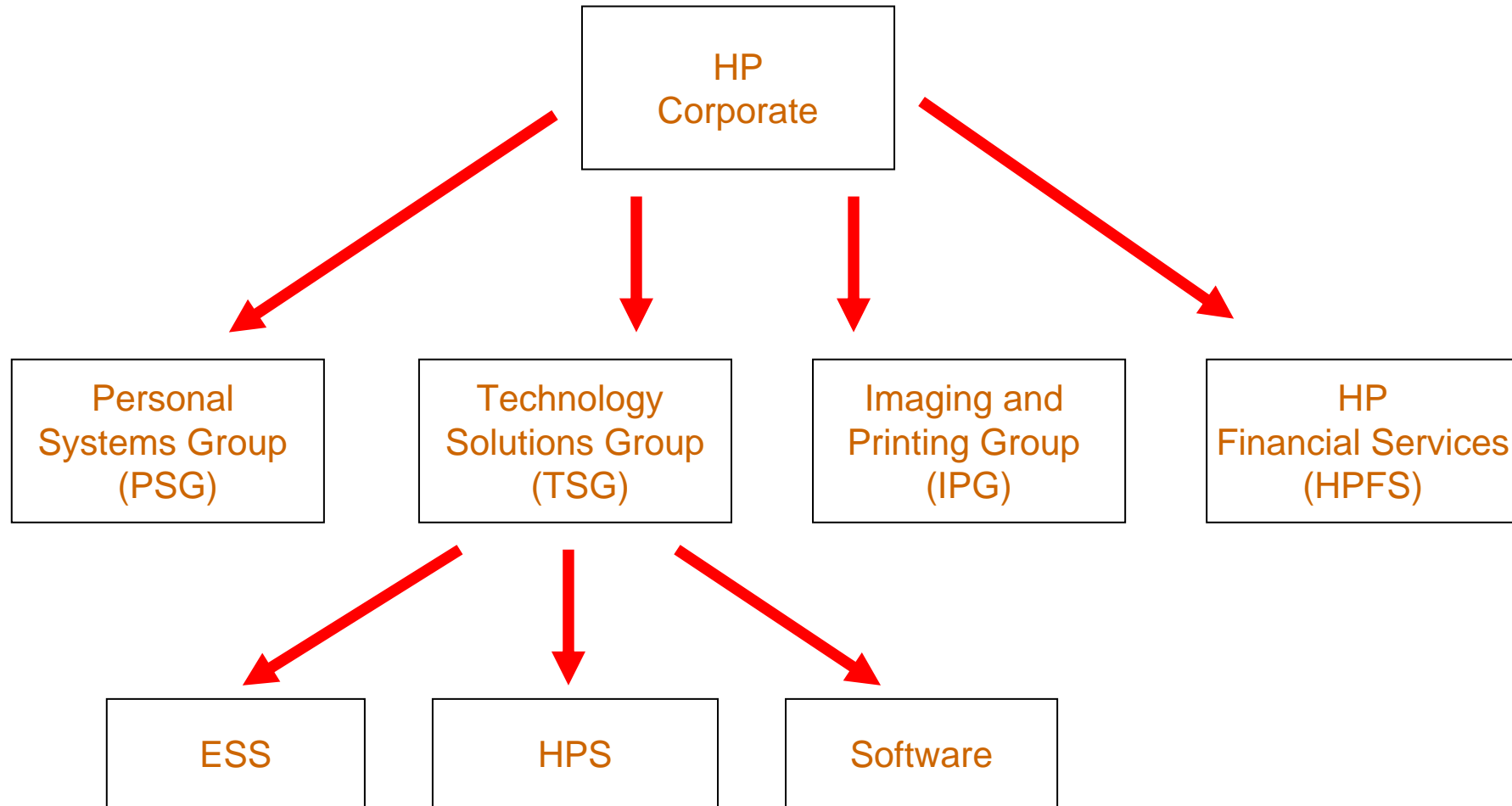
United States	37%
Americas (excluding US)	6%
Europe/Middle East/Africa	41%
Asia Pacific (including Japan)	16%

Source: HP 10-K Report 2005, P.131



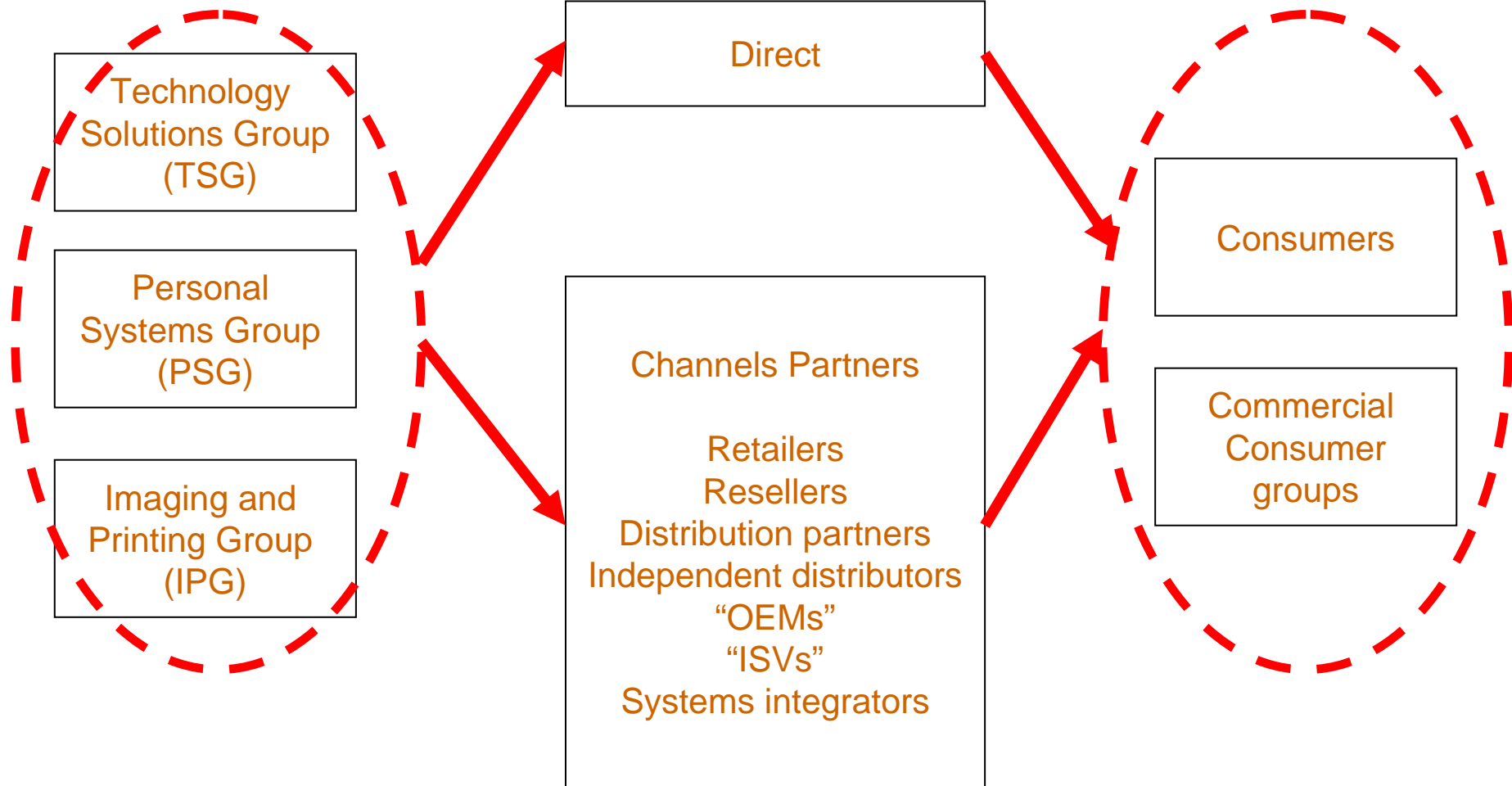


Operational Structure



Distribution Channels

Big Box Model





Management



**Mark V. Hurd; age 49;
Chief Executive Officer and President**

- ❖ Mr. Hurd has served as Chief Executive Officer ("CEO"), President and a member of the Board of Directors since April 1, 2005. Prior to that, he served as Chief Executive Officer of NCR Corporation, a technology company ("NCR"), from March 2003 to March 2005 and as President of NCR from July 2001 to March 2005. From September 2002 to March 2003, Mr. Hurd was the Chief Operating Officer of NCR, and from July 2000 until March 2003 he was Chief Operating Officer of NCR's Teradata data – warehousing division. Mr. Hurd also served as an Executive Vice President of NCR from July 2000 through July 2001.





Management



- ❖ **Executive Team**
 - » **Mark Hurd**
Chief Executive Officer and President
 - » **E-mail Mark** » **Ann O. Baskins**
Senior Vice President, General Counsel and Secretary
 - » **Gilles Bouchard**
Executive Vice President, Global Operations
 - » **Todd Bradley**
Executive Vice President, Personal Systems Group
 - » **Vyomesh (VJ) Joshi**
Executive Vice President, Imaging and Printing Group
 - » **Ann M. Livermore**
Executive Vice President, Technology Solutions Group
 - » **Cathy Lyons**
Executive Vice President and Chief Marketing Officer
 - » **Randall (Randy) D. Mott**
Executive Vice President and Chief Information Officer
 - » **Marcela Perez de Alonso**
Executive Vice President, Human Resources
 - » **Shane V. Robison**
Executive Vice President and Chief Strategy and Technology Officer
 - » **Robert P. Wayman**
Executive Vice President and Chief Financial Officer
 - » **Jon Flaxman**
Senior Vice President and Controller of Accounting and Financial Reporting
 - » **Richard H. (Dick) Lampman**
Senior Vice President of Research, HP, and Director, HP Labs

- *Experienced*
- *Most of them familiar with HP*
- *A combination of inside and outside*





Management



HPQ's Recent Executive Hires/Appointments – Deepening The Bench

Name	Title	Division	Date of News	Previous Experience	Comments
Thomas Hogan	Senior VP	Software Division within Technology Solutions Group	1/26/2006	President & CEO, Vignette; Senior VP, Worldwide Sales, Siebel Systems; Exec roles in sales, marketing and finance at IBM	Replaces former head of software Nora Denzel, who resigned in November 2005
Bruce Dahlgren	Senior VP, WW Enterprise Sales	Imaging & Printing Group	1/17/2006	VP & GM, Printing Solutions & Services, Lexmark; Senior roles at NCR, AT&T, and Teradata	New role created to bring more focus to the printing and imaging opportunities in large enterprises
Andy W. Mattes	Senior VP, Chief Sales Officer	Technology Solutions Group	1/4/2006	President & CEO, Siemens Communications	New role created following the dissolution of the Customer Solutions Group in July 2005
John W. McCain	Senior VP	H-P Services (Consulting & Integration)	12/2/2005	CEO, iEnergizer; CEO, North America, Capgemini; Senior positions in services at EDS	Coincided with H-P's increased discipline to balance profitability and growth in services
Cathy Lyons	Executive VP, Chief Marketing Officer	None; direct report to CEO Mark Hurd	7/19/2005	Senior VP, Business and Imaging Printing, H-P; VP & GM, Inkjet Supplies Division, H-P; VP & GM, Supplies Division, H-P	Coincided with dissolution of Customer Solutions Group (CSG) and retirement of Mike Winkler, former EVP of CSG
Randall D. Mott	Executive VP, Chief Information Officer	None; direct report to CEO Mark Hurd	7/11/2005	Senior VP and CIO, Dell; Senior VP and CIO, Wal-Mart Stores	Coincided with split of H-P's Global Ops (i.e., supply chain) and IT organization; Gilles Bouchard remains as EVP, Global Ops while Mott takes over CIO role
R. Todd Bradley	Executive VP	Personal Systems Group	6/13/2005	President & CEO, palmOne; Executive VP, Global Operations, Gateway; Senior roles at GE Capital and FedEx	In conjunction with separating the Imaging & Printing and Personal Systems Group into standalone units (groups were combined in January 2005)
Steve Smith	Senior VP	H-P Services	1/10/2005; promoted in July 2005	VP, Professional & Managed Services, Lucent; Head of global sales force, President of Asia-Pacific, and President of Western US, EDS	Hired to run H-P's Managed Services business in January 2005 under CEO Fiorina, but promoted to run entire Services unit by CEO Hurd in July 2005

Source: Company report; Bear Stearns & Co.





Executive Compensations



Top Paid Executives

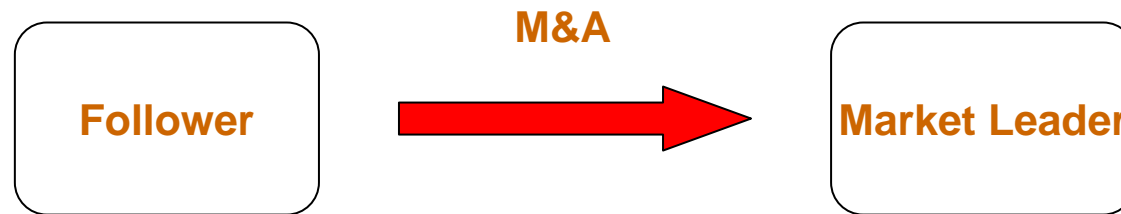
Executive Name	Cash Compensation	Other Compensation	Total
Mark V. Hurd Chief Executive Officer and President	\$5,948,000	\$17,296,835	\$23,244,835
Carleton S. Fiorina Former Chairman and Chief Executive Officer	\$575,287	\$27,977,983	\$28,553,270
Robert P. Wayman Executive Vice President and Chief Financial Officer	\$5,488,688	\$2,270,658	\$7,759,346
Randall D. Mott Executive Vice President and Chief Information Officer	\$2,849,937	\$7,443,090	\$10,293,027
Vyomesh I. Joshi Executive Vice President Imaging and Printing Group	\$1,777,656	\$5,265,264	\$7,042,920
Ann M. Livermore Executive Vice President Technology Solutions Group	\$1,564,448	\$3,412,353	\$4,976,801
Michael J. Winkler Former Executive Vice President	\$2,512,617	\$1,822,016	\$4,334,633
R. Todd Bradley Executive Vice President Personal Systems Group	\$2,004,911	\$2,404,231	\$4,409,142

Source: CoreReference





Growth Strategy



The significant merger with Compaq

However, such strategy resulted in the sacrifice of margin
and the continual restructuring ...





Merger with Compaq



- ❖ *Objective:* Consolidation, not diversification,
Build the foundation of leadership in the market

To be.....

- ❖ No.1 in Wins, Linux, Unix
- ❖ No.1 player in storage and the leader in the storage area network
- ❖ Double service and support capacity
- ❖ Double sales force
- ❖ Gain access to new markets, such as fault-tolerant, some high-performance computing



----- Carly Fiorina, Former CEO, 2002





Merger with Compaq



- ❖ *Did the merger with Compaq work?*
-----measured by Carly' s success criteria
- ❖ *Bring the business together?*
Yes, but more diversified
- ❖ *Achieve clear market leadership?*
Yes
- ❖ *Provide a strong post-merger balance sheet?*
Yes
- ❖ *Result in significant cost saving?*
No
- ❖ *Smooth & effective integration?*
No





Competitors



- ❖ HP is the leader or among the leaders in each business segment
- ❖ The key competitors: IBM and Dell
- ❖ However, various competitors in each segment

ESS: IBM, EMC, Dell, Sun

HPS: IBM Global Services, Electronic Data System Co., Accenture

Software: BMC, Computer Associates International Inc.

Mercury Interactive Co., IBM Tivoli Software

PSG: Dell, Toshiba, Apple, Lenovo, Gateway, Acer, Fujitsu, “white box”

IPG: Lexmark International, Xerox, Epson, Canon USA, Dell

HPFS: IBM Global Financing





Competitive Analysis



Market Position

- ❖ **#1** globally in the inkjet, all-in-one and single function printers, mono and color laser printers, large-format printing, scanners, print servers and ink and laser supplies*
- ❖ **#1** globally in x86, Windows®, Linux and UNIX servers*
- ❖ **#1** in total disk and storage systems*
- ❖ **#2** globally in notebook PCs, Pocket PCs, workstations and blade servers*
- ❖ Awarded Outstanding Customer Service for Consumers**
- ❖ **#1** position in server brand loyalty for ProLiant servers***
- ❖ **#1** in computer and peripherals industry for intangible value analysis reporting — including governance, human capital and emerging market issues — by Innovest Strategic Value Advisors, Inc., a leading independent research firm for the SRI community. HP ranked fifth for environmental reporting.

* Refers to revenue, except storage referred to in units. Source: IDC Q3 2005.

** Source: J.D. Power and Associates, November 2005

*** Source: Technology Business Research, Inc., Q3 2005





Competitive Analysis



Strengths:

- ❖ **ESS:** broad portfolio of servers and storage products, global reach, significant intellectual property and R&D capabilities
- ❖ **HPS:** global delivery organization, technical expertise, diagnostic and IT management tools, flexibility of services
- ❖ **Software:** N/A
- ❖ **PSG:** broad portfolio, innovation and R&D capabilities, global distribution network
- ❖ **IPG:** brand recognition, reputation for quality, breadth of product offerings, large customer base
- ❖ **HPFS:** ability to finance products, services and total solutions



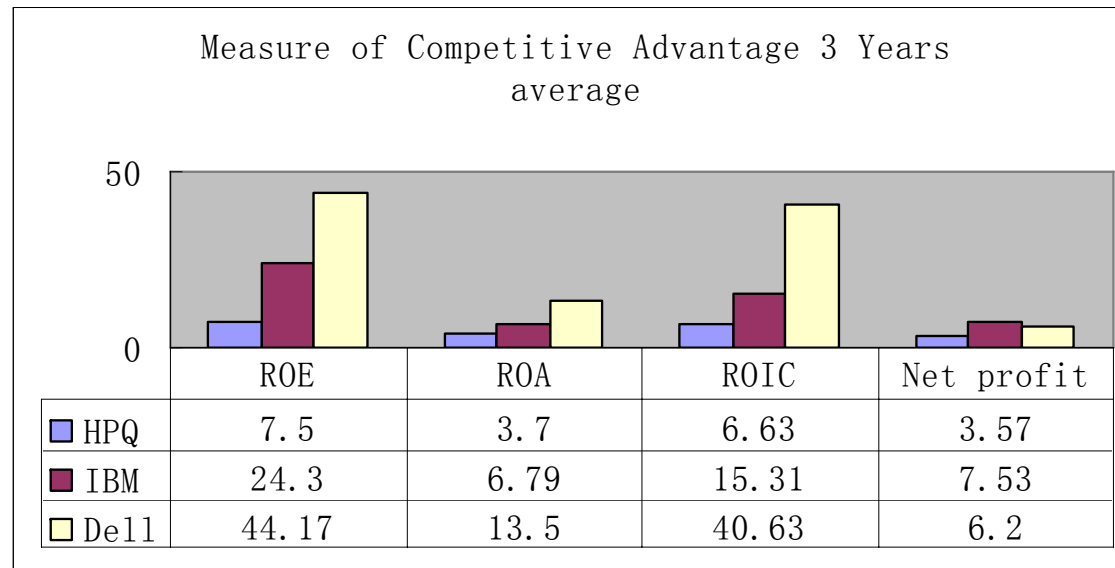


Competitive Analysis



Weakness:

Lower profitability



Source: CoreReference





Risks



-
- ❖ Commoditized Market
 - ❖ Competition
 - ❖ Channel conflict
 - ❖ Changing technology
 - ❖ Fluctuation of currency exchange rate
 - ❖ Uncertainty of restructuring—cost cutting

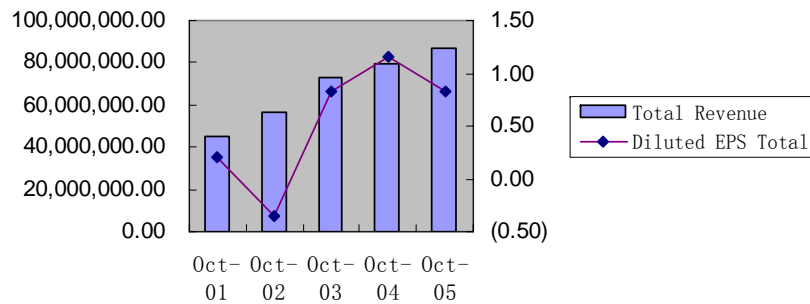




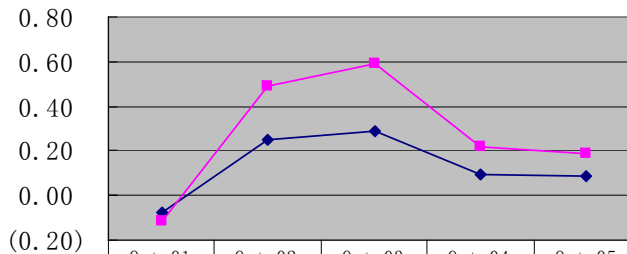
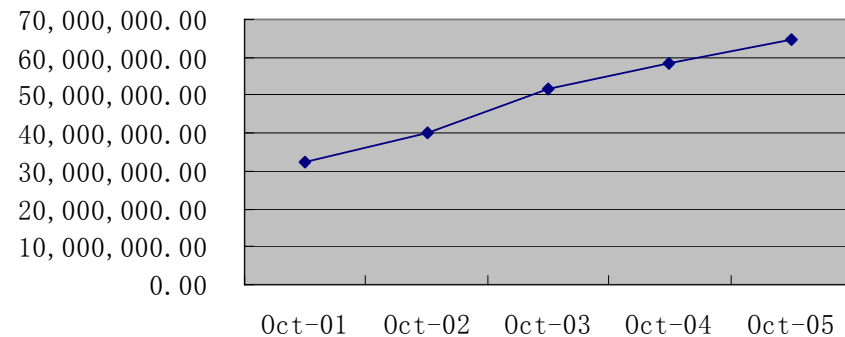
Analysis of Income Statement



Total Revenue & Diluted EPS

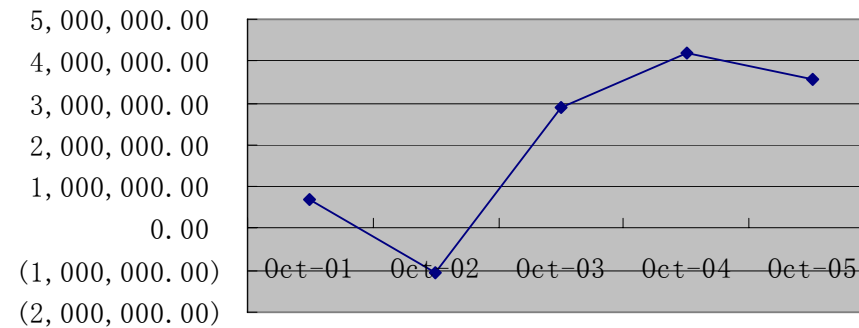


Cost of Sales



	Oct-01	Oct-02	Oct-03	Oct-04	Oct-05
■ Growth Rate of Cost of Sales	(0.04)	0.24	0.30	0.13	0.11
◆ Growth Rate of Total Revenue	(0.07)	0.25	0.29	0.09	0.08

Income Before Tax (EBT);



Source: CoreReference

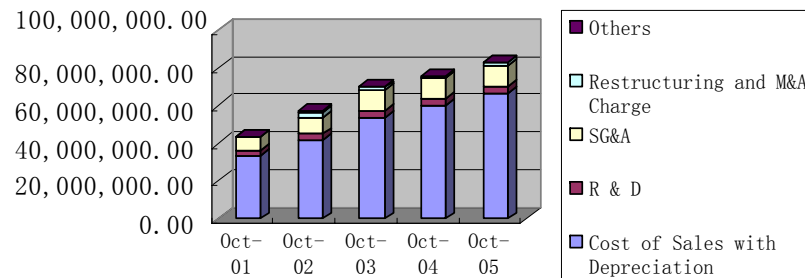




Analysis of Income Statement

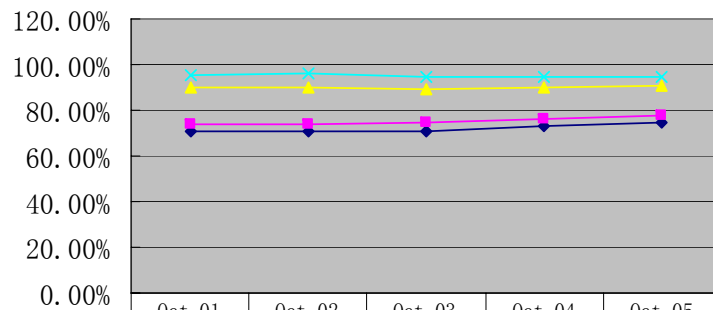


Structure of Costs and Expenses



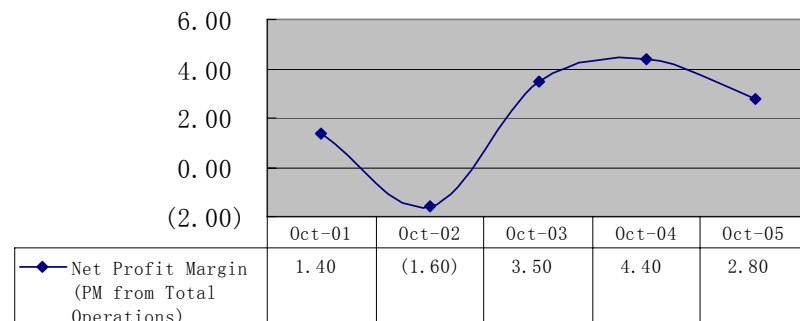
	FY2001	FY2002	FY2003	FY2004	FY2005
Annual Dividend	0.32\$	0.32\$	0.32\$	0.32\$	0.32\$

Source: CoreReference



—x— R&D % of Total Revenue	5.90%	5.85%	5.00%	4.39%	4.03%
—▲— SG&A % of Total Revenue	16.05%	15.96%	15.07%	13.80%	12.90%
—■— Depreciation % of Total Revenue	2.70%	3.74%	3.46%	3.00%	3.03%
—◆— Cost of Sales % of Total Revenue	70.99%	70.44%	71.03%	73.27%	74.65%

Net Profit Margin (PM from Total Operations)



◆ Net Profit Margin (PM from Total Operations)	1.40	(1.60)	3.50	4.40	2.80
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Income Statement



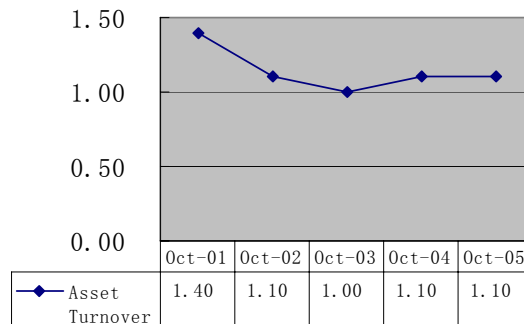
	Oct-05	Oct-04	Oct-03	Oct-02	Oct-01
Operating Revenue	86,696,000.00	79,905,000.00	73,061,000.00	56,588,000.00	45,226,000.00
Total Revenue	86,696,000.00	79,905,000.00	73,061,000.00	56,588,000.00	45,226,000.00
Adjustment to Revenue	0.00	0.00	0.00	0.00	0.00
Cost of Sales	64,718,000.00	58,548,000.00	51,893,000.00	39,862,000.00	32,105,000.00
Cost of Sales with Depreciation	66,440,000.00	60,340,000.00	53,857,000.00	41,579,000.00	33,474,000.00
Gross Margin	0.00	0.00	0.00	0.00	11,752,000.00
Gross Operating Profit	21,978,000.00	21,357,000.00	21,168,000.00	16,726,000.00	13,121,000.00
R & D	3,490,000.00	3,506,000.00	3,652,000.00	3,312,000.00	2,670,000.00
SG&A	11,184,000.00	11,024,000.00	11,012,000.00	9,033,000.00	7,259,000.00
Advertising	0.00	0.00	0.00	0.00	0.00
Operating Profit	3,473,000.00	4,227,000.00	2,896,000.00	(1,012,000.00)	1,439,000.00
Operating Profit b/f Depreciation	7,304,000.00	6,827,000.00	6,504,000.00	4,381,000.00	3,192,000.00
Depreciation	2,344,000.00	2,395,000.00	2,527,000.00	2,119,000.00	1,369,000.00
Depreciation Unreconciled	0.00	0.00	0.00	0.00	0.00
Amortization	0.00	0.00	0.00	0.00	0.00
Amortization of Intangibles	622,000.00	603,000.00	563,000.00	402,000.00	0.00
Operating Income After Depreciation	4,960,000.00	4,432,000.00	3,977,000.00	2,262,000.00	1,823,000.00
Interest Income	189,000.00	35,000.00	21,000.00	52,000.00	171,000.00
Earnings from Equity Interest	0.00	0.00	0.00	0.00	0.00
Other Income, Net	(13,000.00)	4,000.00	(29,000.00)	0.00	0.00
Income Acquired in Process R&D	(2,000.00)	(37,000.00)	(1,000.00)	(793,000.00)	0.00
Income Restructuring and M&A	(1,684,000.00)	(168,000.00)	(1,080,000.00)	(2,481,000.00)	(384,000.00)
Other Special Charges	93,000.00	(70,000.00)	0.00	(92,000.00)	(908,000.00)
Total Income Avail for Interest Expense (EBIT);	3,543,000.00	4,196,000.00	2,888,000.00	(1,052,000.00)	702,000.00
Interest Expense	0.00	0.00	0.00	0.00	0.00
Income Before Tax (EBT);	3,543,000.00	4,196,000.00	2,888,000.00	(1,052,000.00)	702,000.00
Income Taxes	1,145,000.00	699,000.00	349,000.00	(129,000.00)	78,000.00
Minority Interest	0.00	0.00	0.00	0.00	0.00
Preferred Securities of Subsidiary Trust	0.00	0.00	0.00	0.00	0.00
Net Income from Continuing Operations	2,398,000.00	3,497,000.00	2,539,000.00	(923,000.00)	624,000.00
Net Income from Discontinued Ops.	0.00	0.00	0.00	0.00	0.00
Net Income from Total Operations	2,398,000.00	3,497,000.00	2,539,000.00	(923,000.00)	624,000.00
Extraordinary Income / Losses	0.00	0.00	0.00	0.00	0.00
Income from Cum. Effect of Acct Chg	0.00	0.00	0.00	0.00	(272,000.00)
Income from Tax Loss Carryforward	0.00	0.00	0.00	0.00	0.00
Other Gains (Losses);	0.00	0.00	0.00	20,000.00	56,000.00
Total Net Income	2,398,000.00	3,497,000.00	2,539,000.00	(903,000.00)	408,000.00
Normalized Income	3,991,000.00	3,772,000.00	3,620,000.00	2,443,000.00	1,916,000.00



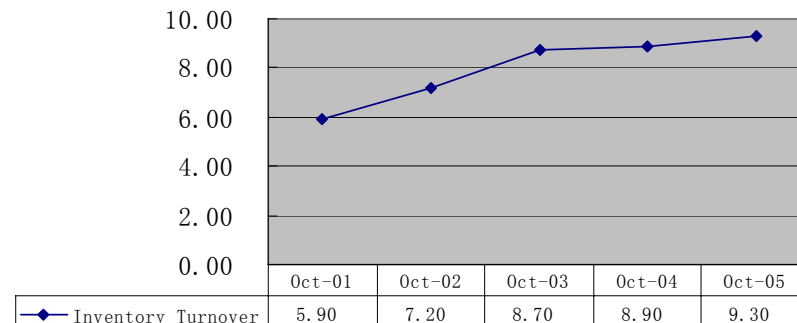
Analysis of Balance Sheet



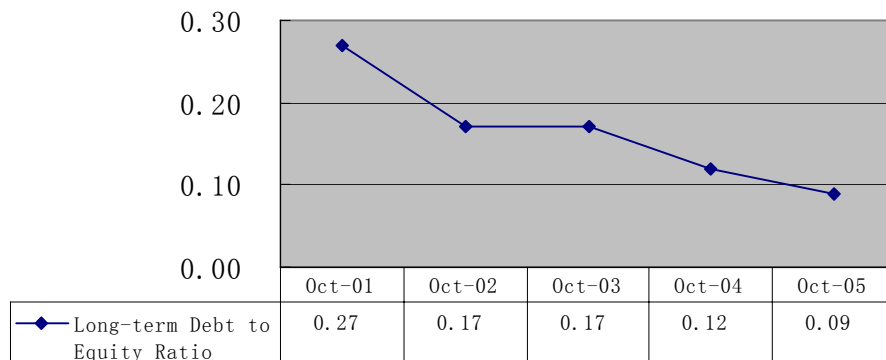
Asset Turnover Ratio



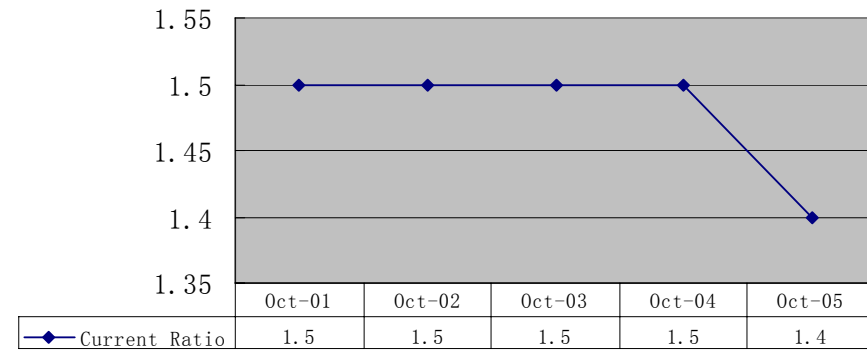
Inventory Turnover Ratio



Long-term Debt to Equity Ratio



Current Ratio



Source: CoreReference

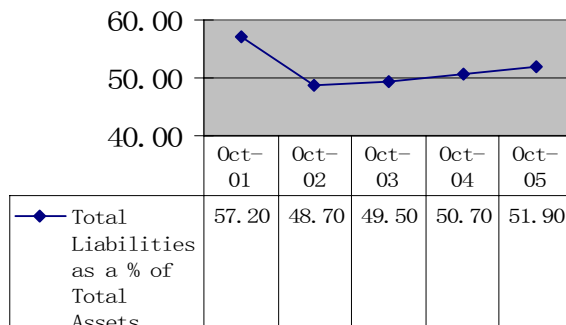




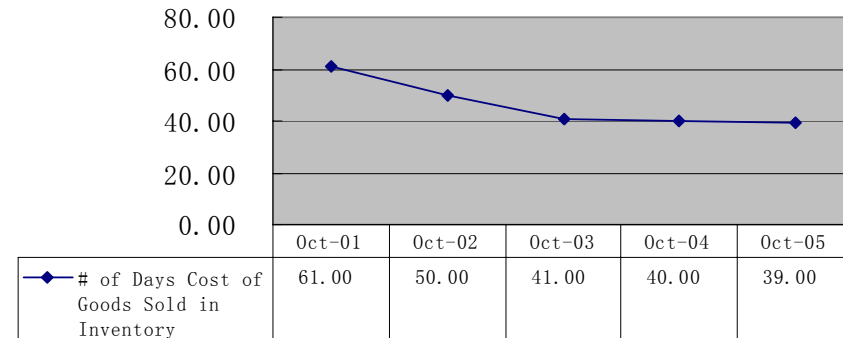
Analysis of Balance Sheet



Total Liabilities as a % of Total Assets



of Days Cost of Goods Sold in Inventory



Source: CoreReference





Balance Sheet (Assets)



	Oct-05	Oct-04	Oct-03	Oct-02	Oct-01
Assets					
Cash and Equivalents	13,911,000.00	12,663,000.00	14,188,000.00	11,192,000.00	4,197,000.00
Restricted Cash	0.00	0.00	0.00	0.00	0.00
Marketable Securities	18,000.00	311,000.00	403,000.00	237,000.00	139,000.00
Accounts Receivable	9,903,000.00	10,226,000.00	8,921,000.00	8,456,000.00	4,488,000.00
Loans Receivable	0.00	0.00	0.00	0.00	0.00
Other Receivable	7,461,000.00	7,784,000.00	2,965,000.00	3,453,000.00	2,183,000.00
Receivables	17,364,000.00	18,010,000.00	11,886,000.00	11,909,000.00	6,671,000.00
Inventories	6,877,000.00	7,071,000.00	6,065,000.00	5,797,000.00	5,204,000.00
Prepaid Expenses	1,552,000.00	0.00	0.00	0.00	0.00
Current Deferred Income Taxes	3,612,000.00	3,744,000.00	0.00	0.00	0.00
Other Current Assets	0.00	1,102,000.00	8,454,000.00	6,940,000.00	5,094,000.00
Total Current Assets	43,334,000.00	42,901,000.00	40,996,000.00	36,075,000.00	21,305,000.00
Gross Fixed Assets (Plant, Prop. & Equip.)	13,880,000.00	13,836,000.00	13,299,000.00	12,536,000.00	9,808,000.00
Accumulated Depreciation & Depletion	7,429,000.00	7,187,000.00	6,817,000.00	5,612,000.00	5,411,000.00
Net Fixed Assets	6,451,000.00	6,649,000.00	6,482,000.00	6,924,000.00	4,397,000.00
Intangibles	20,030,000.00	19,931,000.00	19,250,000.00	19,951,000.00	0.00
Cost in Excess	0.00	0.00	0.00	0.00	0.00
Non-Current Deferred Income Taxes	0.00	0.00	0.00	0.00	0.00
Other Non-Current Assets	7,502,000.00	6,657,000.00	7,980,000.00	7,760,000.00	6,882,000.00
Total Non Current Assets	33,983,000.00	33,237,000.00	33,712,000.00	34,635,000.00	11,279,000.00
Total Assets	77,317,000.00	76,138,000.00	74,708,000.00	70,710,000.00	32,584,000.00





Balance Sheet (Liabilities)



	Oct-05	Oct-04	Oct-03	Oct-02	Oct-01
Liabilities					
Accounts Payable	10,223,000.00	9,377,000.00	9,285,000.00	7,012,000.00	3,791,000.00
Notes Payable	1,831,000.00	2,511,000.00	1,080,000.00	1,793,000.00	1,722,000.00
Short Term Debt	0.00	0.00	0.00	0.00	0.00
Accrued Expenses	0.00	0.00	0.00	0.00	0.00
Accrued Liabilities	10,881,000.00	9,825,000.00	9,254,000.00	8,704,000.00	3,289,000.00
Deferred Revenues	3,815,000.00	2,958,000.00	3,657,000.00	3,260,000.00	1,867,000.00
Current Deferred Income Taxes	0.00	0.00	0.00	0.00	0.00
Other Current Liabilities	4,710,000.00	3,917,000.00	3,354,000.00	3,541,000.00	3,295,000.00
Total Current Liabilities	31,460,000.00	28,588,000.00	26,630,000.00	24,310,000.00	13,964,000.00
Long Term Debt	3,392,000.00	4,623,000.00	6,494,000.00	6,035,000.00	3,729,000.00
Capital Lease Obligations	0.00	0.00	0.00	0.00	0.00
Deferred Income Taxes	0.00	0.00	0.00	0.00	0.00
Other Non-Current Liabilities	5,289,000.00	5,363,000.00	3,838,000.00	4,103,000.00	938,000.00
Minority Interest	0.00	0.00	0.00	0.00	0.00
Preferred Securities of Subsidiary Trust	0.00	0.00	0.00	0.00	0.00
Preferred Equity outside Stock Equity	0.00	0.00	0.00	0.00	0.00
Total Non-Current Liabilities	8,681,000.00	9,986,000.00	10,332,000.00	10,138,000.00	4,667,000.00
Total Liabilities	40,141,000.00	38,574,000.00	36,962,000.00	34,448,000.00	18,631,000.00
Preferred Stock Equity	0.00	0.00	0.00	0.00	0.00
Common Stock Equity	37,176,000.00	37,564,000.00	37,746,000.00	36,262,000.00	13,953,000.00
Common Par	28,000.00	29,000.00	30,000.00	30,000.00	19,000.00
Additional Paid In Capital	20,490,000.00	22,129,000.00	24,587,000.00	24,660,000.00	200,000.00
Cumulative Translation Adjustment	0.00	30,000.00	0.00	0.00	0.00
Retained Earnings	16,679,000.00	15,649,000.00	13,332,000.00	11,973,000.00	13,693,000.00
Treasury Stock	0.00	0.00	0.00	0.00	0.00
Other Equity Adjustments	(21,000.00)	(273,000.00)	(203,000.00)	(401,000.00)	41,000.00
Total Capitalization	40,568,000.00	42,187,000.00	44,240,000.00	42,297,000.00	17,682,000.00
Total Equity	37,176,000.00	37,564,000.00	37,746,000.00	36,262,000.00	13,953,000.00
Total Liabilities & Stock Equity	77,317,000.00	76,138,000.00	74,708,000.00	70,710,000.00	32,584,000.00
Additional Data					
Cash Flow	4,742,000.00	5,892,000.00	5,066,000.00	1,196,000.00	1,993,000.00
Working Capital	11,874,000.00	14,313,000.00	14,366,000.00	11,765,000.00	7,341,000.00
Free Cash Flow	4,466,000.00	866,000.00	2,936,000.00	2,933,000.00	413,000.00
Invested Capital	40,568,000.00	42,187,000.00	44,240,000.00	42,297,000.00	17,682,000.00
Share Data					
Shares Outstanding Common Class Only	2,837,000.00	2,911,000.00	3,043,000.00	3,049,000.00	1,939,000.00
Preferred Shares	0.00	0.00	0.00	0.00	0.00
Total Ordinary Shares	0.00	0.00	0.00	0.00	0.00
Total Common Shares Outstanding	2,837,000.00	2,911,000.00	3,043,000.00	3,049,000.00	1,939,000.00

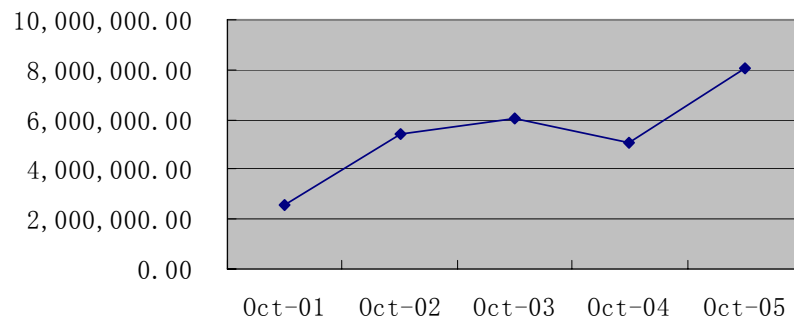




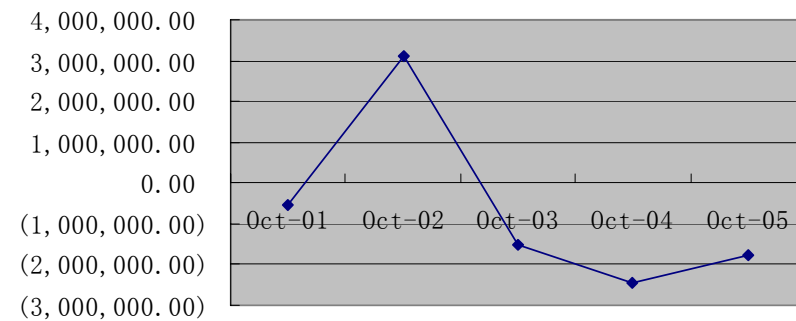
Analysis of Cash Flow



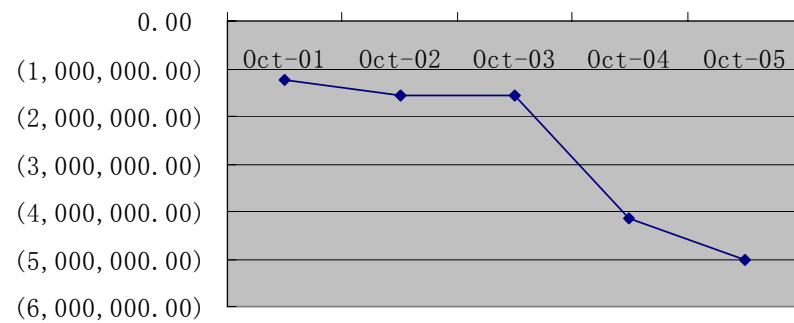
Net Cash from Operating Activities



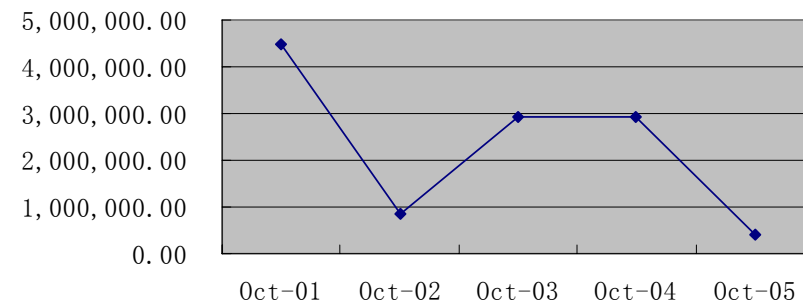
Net Cash from Investing Activities



Net Cash from Financing Activities



Free Cash Flow



Source: CoreReference

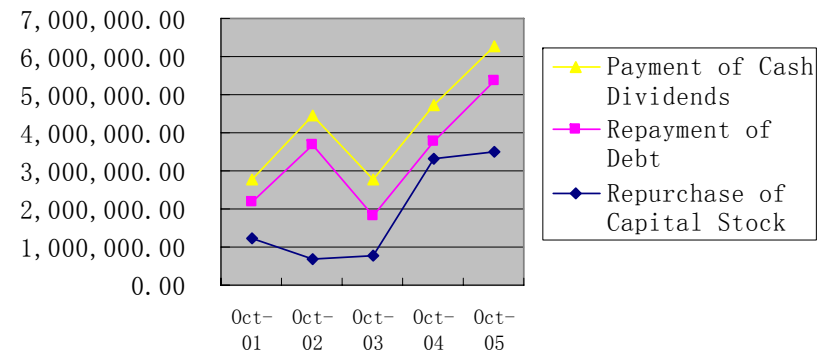
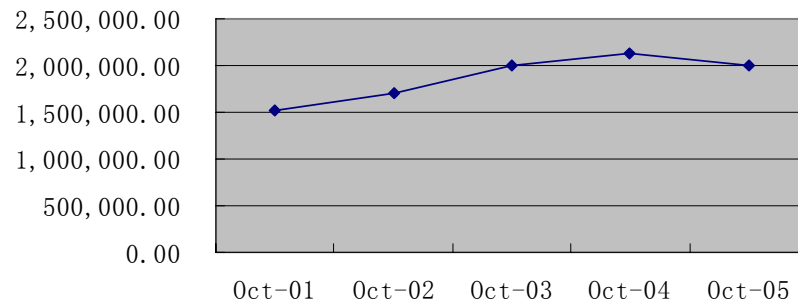




Analysis of Cash Flow



Purchase of Property, Plant, Equipment



Source: CoreReference



Statement of Cash Flow

	Oct-05	Oct-04	Oct-03	Oct-02	Oct-01
Operating Activities					
Net Income (Loss)	2,398,000.00	3,497,000.00	2,539,000.00	(903,000.00)	408,000.00
Depreciation	2,344,000.00	2,395,000.00	2,527,000.00	2,119,000.00	1,369,000.00
Amortization	0.00	0.00	0.00	0.00	0.00
Amortization of Intangibles	0.00	0.00	0.00	0.00	0.00
Deferred Income Taxes	(162,000.00)	26,000.00	(279,000.00)	(351,000.00)	(970,000.00)
Operating (Gains) Losses	1,864,000.00	670,000.00	1,627,000.00	4,039,000.00	1,178,000.00
Extraordinary (Gains) Losses	0.00	0.00	0.00	0.00	0.00
Changes in Working Capital					
(Increase) Decrease in Receivables	666,000.00	(696,000.00)	197,000.00	899,000.00	566,000.00
(Increase) Decrease in Inventories	(208,000.00)	(1,341,000.00)	(638,000.00)	765,000.00	1,096,000.00
(Increase) Decrease in Prepaid Expenses	0.00	0.00	0.00	0.00	0.00
(Increase) Decrease in Other Current Assets	0.00	0.00	0.00	0.00	0.00
(Increase) Decrease in Payables	846,000.00	3,000.00	2,257,000.00	395,000.00	(1,249,000.00)
(Increase) Decrease in Other Curr Liabs.	501,000.00	(633,000.00)	53,000.00	(368,000.00)	(195,000.00)
(Increase) Decrease in Other Working Capital	(221,000.00)	1,078,000.00	(2,314,000.00)	(1,289,000.00)	362,000.00
Other Non-Cash Items	0.00	89,000.00	88,000.00	138,000.00	(4,000.00)
Net Cash from Continuing Operations	8,028,000.00	5,088,000.00	6,057,000.00	5,444,000.00	2,561,000.00
Net Cash from Discontinued Operations	0.00	0.00	0.00	0.00	0.00
Net Cash from Operating Activities	8,028,000.00	5,088,000.00	6,057,000.00	5,444,000.00	2,561,000.00
Investing Activities					
Sale of Property, Plant, Equipment	542,000.00	447,000.00	353,000.00	362,000.00	447,000.00
Sale of Long Term Investments	0.00	0.00	0.00	0.00	0.00
Sale of Short Term Investments	2,066,000.00	1,064,000.00	875,000.00	381,000.00	742,000.00
Purchase of Property, Plant, Equipment	(1,995,000.00)	(2,126,000.00)	(1,995,000.00)	(1,710,000.00)	(1,527,000.00)
Acquisitions	(641,000.00)	(1,124,000.00)	(149,000.00)	0.00	0.00
Purchase of Long Term Investments	0.00	0.00	0.00	0.00	0.00
Purchase of Short Term Investments	(1,729,000.00)	(715,000.00)	(596,000.00)	(351,000.00)	(434,000.00)
Other Investing Changes Net	0.00	0.00	0.00	4,436,000.00	223,000.00
Cash from Disc. Investing Activities	0.00	0.00	0.00	0.00	0.00
Net Cash from Investing Activities	(1,757,000.00)	(2,454,000.00)	(1,512,000.00)	3,118,000.00	(549,000.00)
Financing Activities					
Issuance of Debt	84,000.00	9,000.00	749,000.00	2,529,000.00	1,207,000.00
Issuance of Capital Stock	1,161,000.00	570,000.00	482,000.00	377,000.00	354,000.00
Cash Used for					
Repayment of Debt	(1,828,000.00)	(457,000.00)	(1,052,000.00)	(3,001,000.00)	(930,000.00)
Repurchase of Capital Stock	(3,514,000.00)	(3,309,000.00)	(751,000.00)	(671,000.00)	(1,240,000.00)
Payment of Cash Dividends	(926,000.00)	(972,000.00)	(977,000.00)	(801,000.00)	(621,000.00)
Other Financing Charges, Net	0.00	0.00	0.00	0.00	0.00
Cash from Disc. Financing Activities	0.00	0.00	0.00	0.00	0.00
Net Cash from Financing Activities	(5,023,000.00)	(4,159,000.00)	(1,549,000.00)	(1,567,000.00)	(1,230,000.00)
Effect of Exchange Rate Changes	0.00	0.00	0.00	0.00	0.00
Net Change in Cash & Cash Equivalents	1,248,000.00	(1,525,000.00)	2,996,000.00	6,995,000.00	782,000.00
Cash at Beginning of Period	12,663,000.00	14,188,000.00	11,192,000.00	4,197,000.00	3,415,000.00
Cash at End of Period	13,911,000.00	12,663,000.00	14,188,000.00	11,192,000.00	4,197,000.00



Valuation: Philip Fisher's four dimensions



- ❖ Superiority in Production, Marketing, Research and Financial skills
Broad portfolio, strong market position, strong R&D
- ❖ The People Factor
Strong executive team: a combination of new & old
- ❖ Investment characteristics of some businesses
Diversified, continually evolving, but not very profitable
- ❖ Price of the investment
High: current stock price 34.19\$ 52 wk range: 19.57- 34.52\$





Valuation: Price Multiples

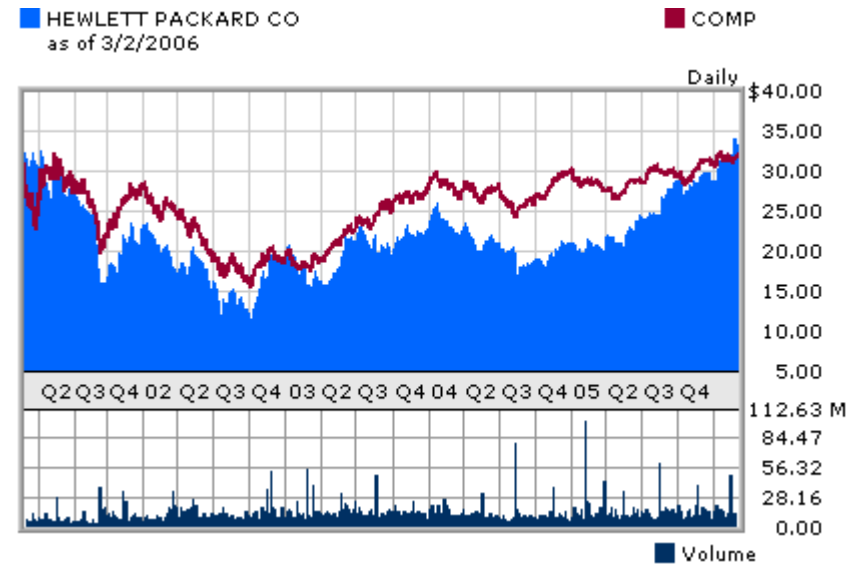


	P/E	P/CF	P/S
Last 3 yrs range	34.2-16.2 x	16.8-9.2 x	0.92-0.68 x
Target price range	28.04-13.28 \$	32.42-17.76 \$	27.3-19.96 \$

Source: CoreReference



Source: www.hp.com





Q1 FY06 Upside



US\$ in millions, unless otherwise stated

	FQ106		FQ405	FQ105
<u>Revenue</u>	<u>Actuals</u>	<u>Est.</u>		
Personal Systems	\$7,449	\$7,230	\$7,113	\$6,873
<i>Operating Margin</i>	3.9%	3.0%	2.8%	2.1%
Imaging & Printing	6,545	6,356	6,785	6,067
<i>Operating Margin</i>	14.9%	13.2%	13.2%	15.4%
Enterprise Systems	4,240	4,216	4,471	4,047
<i>Operating Margin</i>	7.7%	6.0%	9.0%	1.8%
Services	3,757	3,979	3,900	3,815
<i>Operating Margin</i>	7.8%	8.3%	8.3%	7.4%
Software	304	260	311	240
<i>Operating Margin</i>	3.0%	-10.0%	9.2%	-16.9%
Financing	496	566	514	555
<i>Operating Margin</i>	7.7%	10.0%	10.1%	8.1%
Corporate Investments	129	140	142	115
Eliminations	(261)	(260)	(323)	(258)
Total Revenue	22,659	22,487	22,914	21,454
Gross Margin	23.2%	23.1%	23.5%	22.9%
Operating Margin	7.5%	7.1%	7.6%	6.2%
EPS	\$ 0.48	\$0.44	\$ 0.48	\$ 0.32
EPS (ex Options)	\$ 0.52	\$0.47	\$ 0.51	\$ 0.37

Source: Company data, Credit Suisse estimates





Investment Thesis



- ❖ Very strong market position with lower margin
- ❖ Stock price at the high end of the last 5 years
- ❖ Positive signs: *turnaround?*
 - + improved margin in Q106 (YoY)
 - + increasing restructuring-related cost savings
 - + high expectation for the current executive team

Recommendation based on fundamental analysis:

Hold





Think Different

APPLE





Early History



- ❖ Incorporated in 1977
- ❖ Steve Jobs & Steve Wozniak
- ❖ Apple II+ (1978, \$1,195) - 48K RAM, included a Basic in the ROM written by a new company called Microsoft.



- ❖ Macintosh (1984, \$2,495) - the first affordable computer to include a Graphical User Interface. It was built around the new Motorola 68000 chip, It originally sold for \$2,495.





Product Line (1)



Hardware Products	
Desktops	iMac, Mac mini, Power Mac, eMac
Portables	iBook, PowerBook
Servers	Xserver, Xserver RAID
Digital Life	AirPort Express, Airport Extreme, iSight, Mighty Mouse
Displays	Apple Cinema Display 20, 23, 30-inch
Music Products and Services	
iPod, iPod nano, iPod shuffle	
iTune Music Stores	





Product Line (2)



Software Products	
Operating System	Mac OS X Tiger
Server Solutions	Apple Remote Desktop 2 Xsan
Professional Applications	Aperture, Logic Pro 7, Shake 4 Final Cut Studio – Final Cut Pro 5, Soundtrack Pro, Motion 2, DVD Studio Pro 4
Consumer oriented Applications	iLife – iPhoto, iWeb, iMovie HD, iDVD, GarageBand iWork – Keynote 3, Pages
Other Applications	AppleWorks, FileMaker, FileMaker Server Final Cut Express HD, Logic Express
Internet Software and Services	Safari (web browser), QuickTime 7 .Mac (iWeb Publishing, Photocasting, iDisk, Sync, Mail, Backup, Groups)
Product Support and Services	AppleCare, AppleCare Protection Plan





Business Strategy



Digital Hub

1. PC becomes digital hub of MP3 players, PDAs, cellular phones, digital camcorders, digital cameras, CD/DVD players, TV
2. Apple is the ONLY company in the PC industry that controls the design and development of the entire PC

Expanded Distribution

1. Knowledgeable salespersons
2. Apple Sales Consultant Program (for resellers)
3. Apple-Owned Retail Stores since 2001
Total 135 (US 124, Japan 6, UK 4, Toronto 1)

Creative Professionals

1. One of Apple's most important markets
2. Including video, film production, special effects, photography, publishing, music creation, web design

Education

1. Provide products and services that are designed to meet the needs of education customers





SWOT Analysis



Strengths	Weaknesses
Premium Brand Name R&D Customer Retention	Cannibalization Supply of key components Reliance on US market
Opportunities	Threats
New Products Development Expand Retail operations Expand Global Markets iTune Music Store	Strong Competition US Education Market





Steve Jobs & Apple



May 7, 1998



Oct 24, 2005











- ❖ Net worth: \$7.78 billion (Feb,2006)
- ❖ Well known by his aggressive and demanding personality
- ❖ 1955 Born in San Francisco
- ❖ 1976 Co-founded Apple
- ❖ 1983 Invited John Sculley to serve as CEO
- ❖ 1985 Left Apple, founded “NeXT”
- ❖ 1997 Apple bought NeXT and Jobs again became Apple’s CEO
- ❖ 1998 Launched iMac and saved Apple
- ❖ Guinness World Records – “Lowest Paid CEO” (\$1/year since 1997)
- ❖ However he has received many “executive gifts” from the board (\$90M jet in 2001, 30M shares of restricted stocks in 2000~2002)
- ❖ 2005 Cover story on TIME Magazine seems like a selling signal





The Management Team

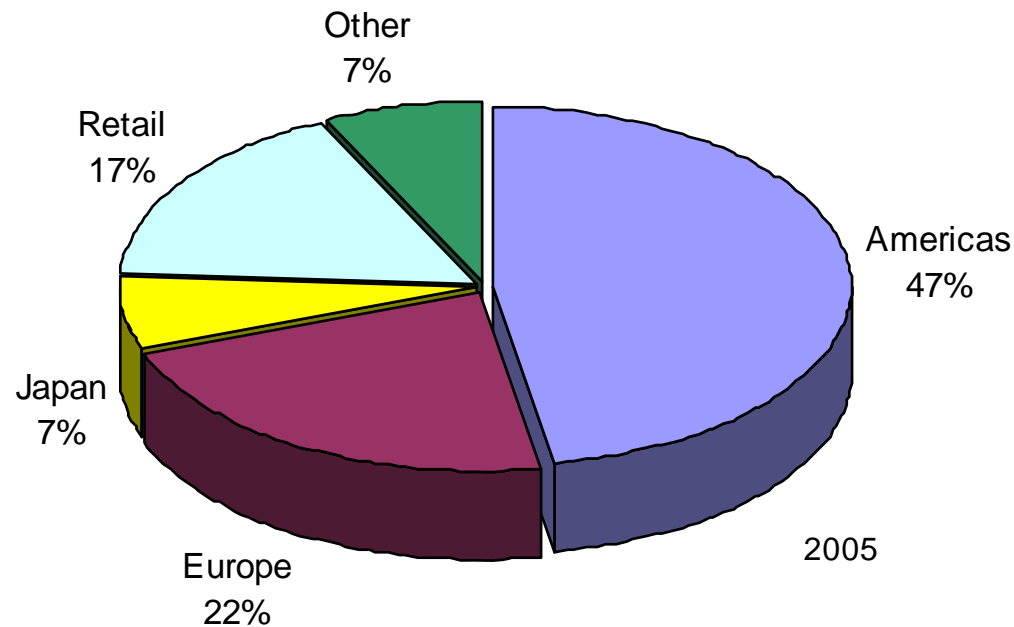


	Steve Jobs CEO, Apple CEO, Pixar		Jon Rubinstein Senior Vice President iPod Division Age 49 (1997) NeXT
	Timothy D. Cook Chief Operating Officer Age 45 (1998)		Philip W. Schiller Senior Vice President Worldwide Product Marketing Age 45 (rejoin in 1997)
	Nancy R. Heinen Senior Vice President and General Counsel Age 49 (1997) NeXT		Bertrand Serlet Senior Vice President Software Engineering Age 44 (1997) NeXT
	Ron B. Johnson Senior Vice President Retail Age 47 (2000)		Sina Tamaddon Senior Vice President Applications Age 48 (1997) NeXT
	Peter Oppenheimer Senior Vice President and Chief Financial Officer Age 42 (1996)		Avadis "Avie" Tevanian, Jr., PH.D Chief Software Technology Officer Age 44 (1997) NeXT



Net Sales (Operating Segment)

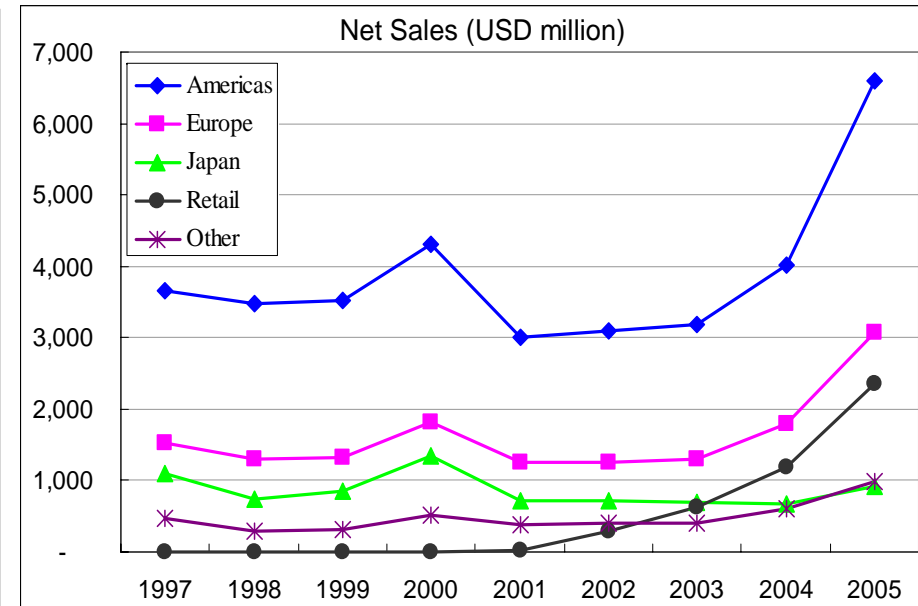
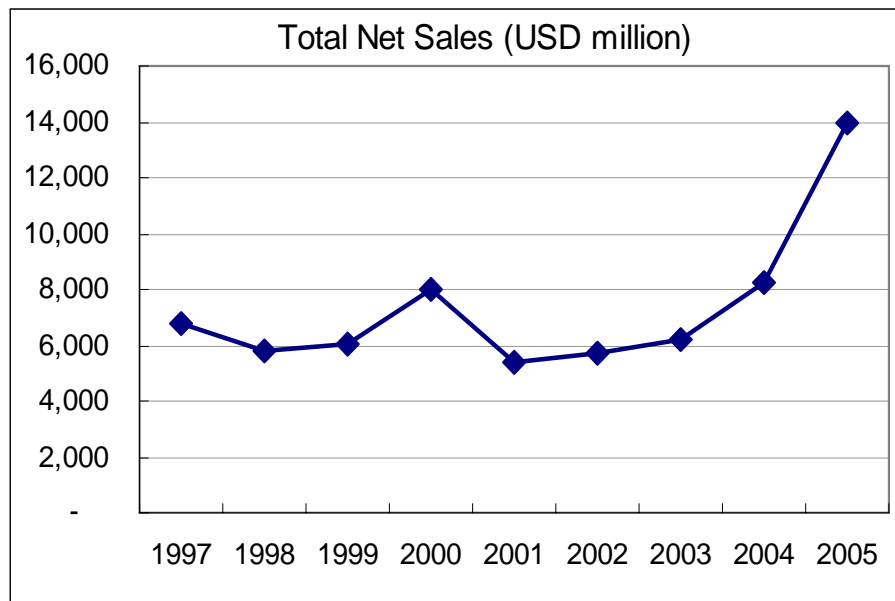
Apples' 5 reportable operating segments
Americas: North & South America
Europe: Europe, Middle East, Africa
Japan
Retail: Apple-Owned 135 retail stores
Other: Asia-Pacific ex Japan, FileMaker



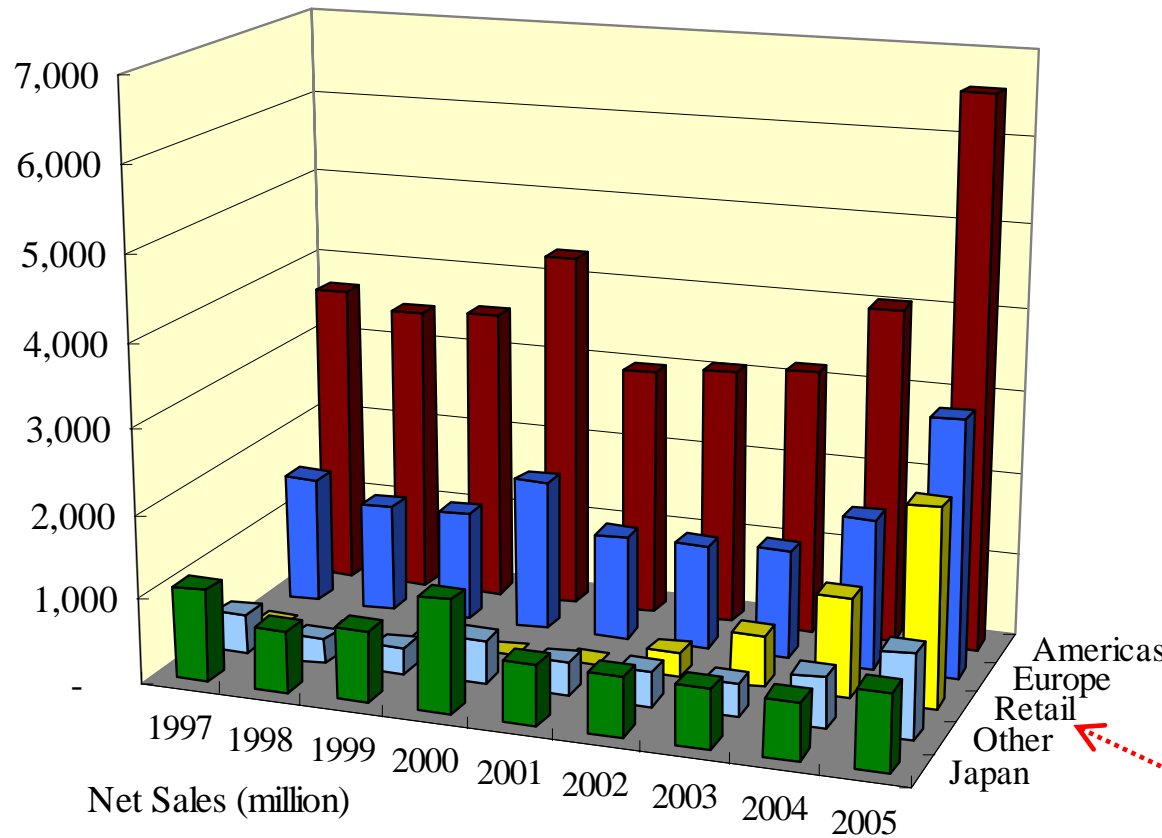
Net Sales (Operating Segment)

Net Sales (million)

	1997	1998	1999	2000	2001	2002	2003	2004	2005
Americas	3,668	3,468	3,527	4,298	2,996	3,088	3,181	4,019	6,590
Europe	1,536	1,295	1,317	1,817	1,249	1,251	1,309	1,799	3,073
Japan	1,098	731	858	1,345	713	710	698	677	920
Retail	-	-	-	-	19	283	621	1,185	2,350
Other	472	293	306	523	386	410	398	599	998
Total	6,774	5,787	6,008	7,983	5,363	5,742	6,207	8,279	13,931



Margin Analysis (by Segment)



Japan	2003	2004	2005
EBIT	121	115	140
Net Sales	698	677	920
EBIT/Sales	17.3%	17.0%	15.2%

Europe	2003	2004	2005
EBIT	130	280	454
Net Sales	1,309	1,799	3,073
EBIT/Sales	9.9%	15.6%	14.8%

Americas	2003	2004	2005
EBIT	323	465	798
Net Sales	3,181	4,019	6,590
EBIT/Sales	10.2%	11.6%	12.1%

Other	2003	2004	2005
EBIT	51	90	118
Net Sales	398	599	998
EBIT/Sales	12.8%	15.0%	11.8%

Retail	2003	2004	2005
EBIT	-	5	39
Net Sales	621	1,185	2,350
EBIT/Sales	-0.8%	3.3%	6.4%

(USD million)





Apple-Owned Retail Stores



- ❖ They are designed and built to serve as high profile venues that function as vehicles for general corporate marketing, corporate events, and brand awareness
- ❖ Operating lease terms generally 10 years, total remaining commitments per store from \$4 to \$46 million



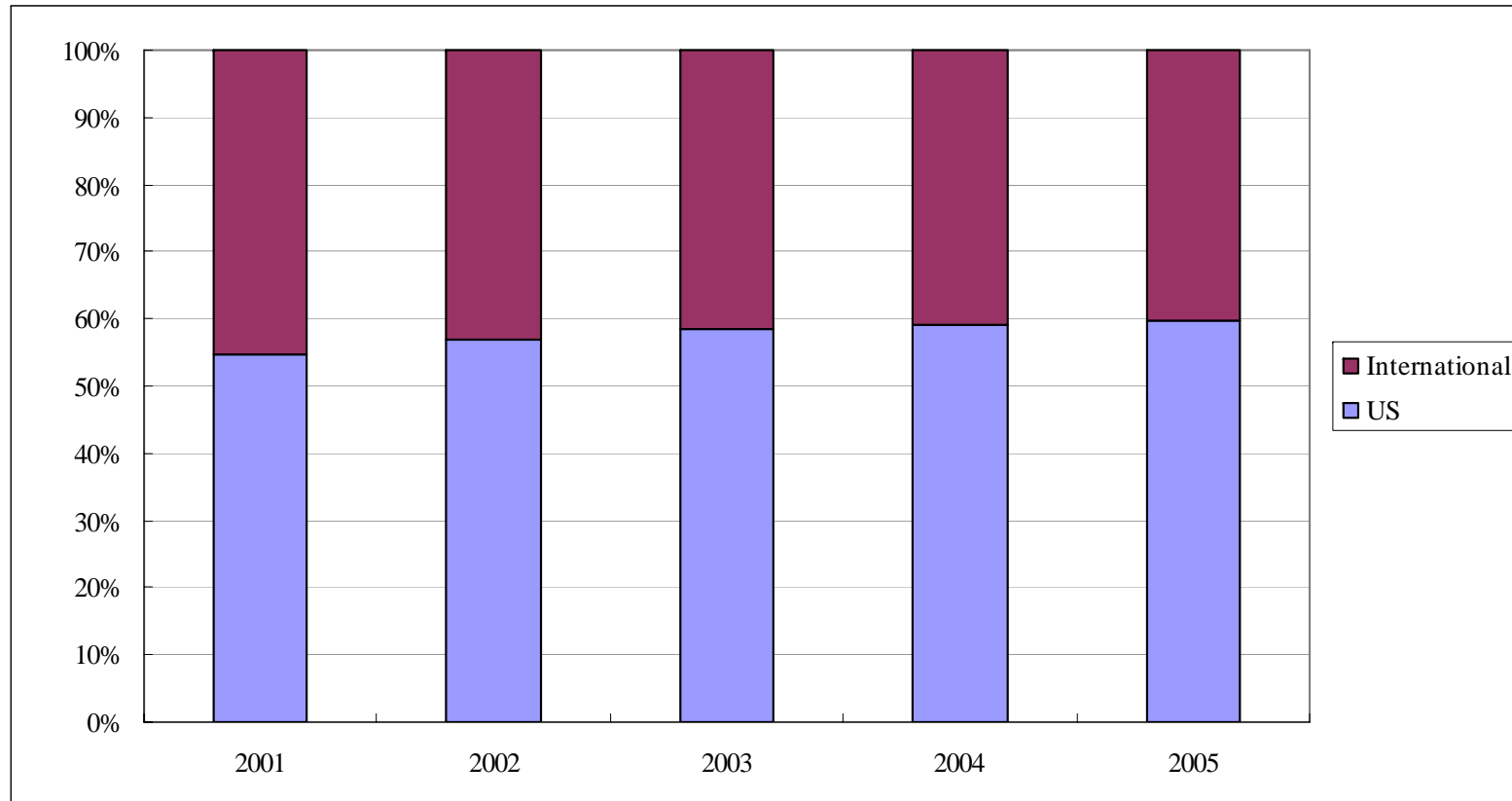


Net Sales (US vs. Int'l)



Net Sales (USD million)

	2001	2002	2003	2004	2005
US	2,936	3,272	3,626	4,893	8,334
International	2,427	2,470	2,581	3,386	5,597
Total	5,363	5,742	6,207	8,279	13,931





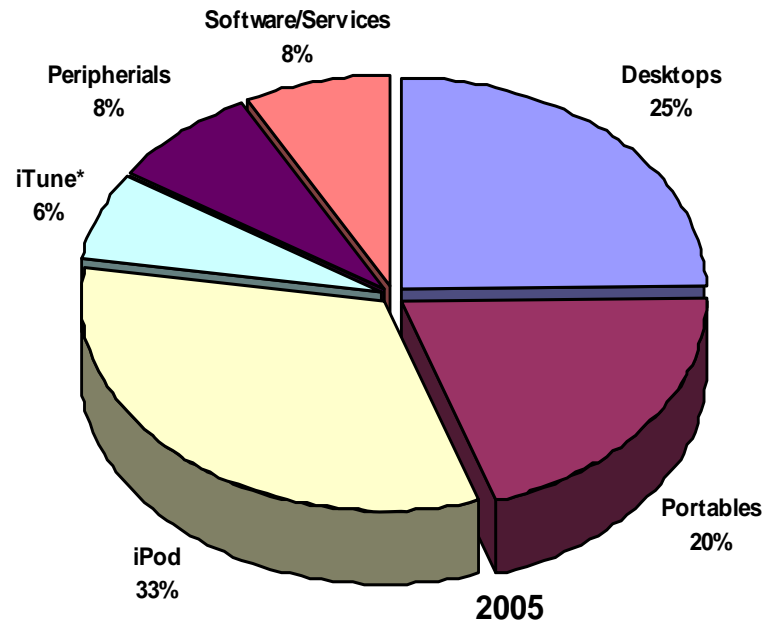
Net Sales (By Product)



Net Sales By Product (USD million)

	2001	2002	2003	2004	2005
Desktops	2,781	2,828	2,475	2,373	3,436
Portables	1,622	1,706	2,016	2,550	2,839
iPod	-	143	345	1,306	4,540
iTune*	-	4	36	278	899
Peripherals	387	527	691	951	1,126
Software/Services	573	534	644	821	1,091
Total Net Sales	5,363	5,742	6,207	8,279	13,931

* including iPod services and iPod accessories





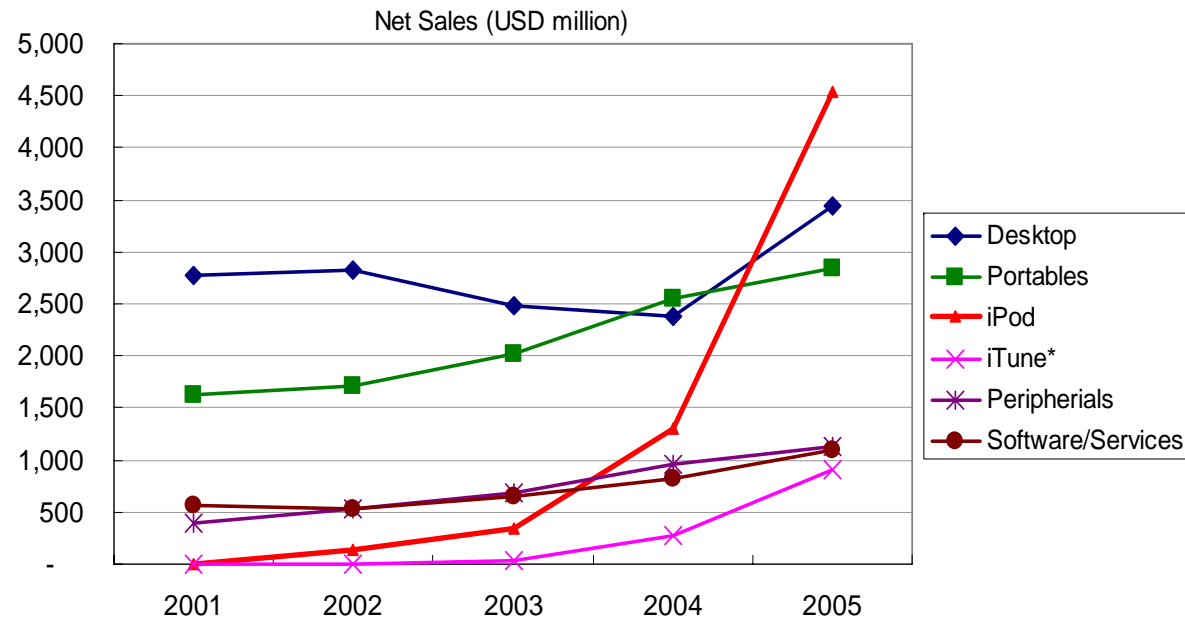
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* including iPod services and iPod accessories





Net Sales (Per Unit)



Net Sales (USD million)

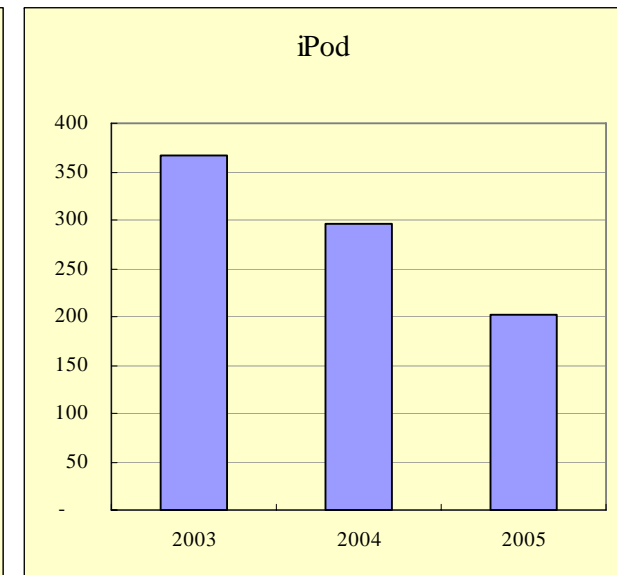
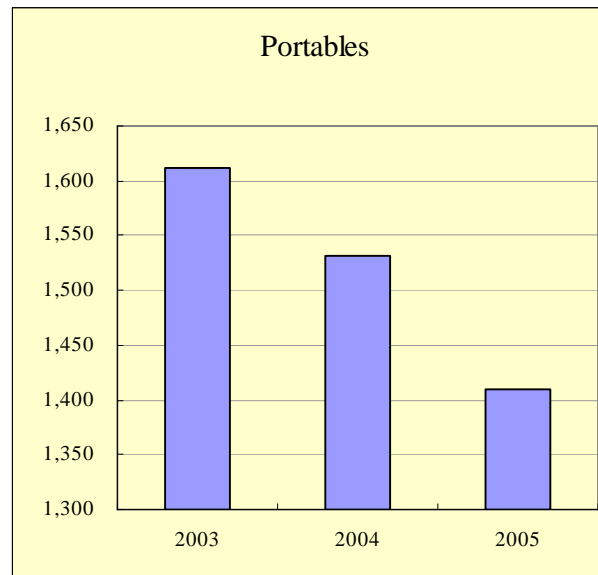
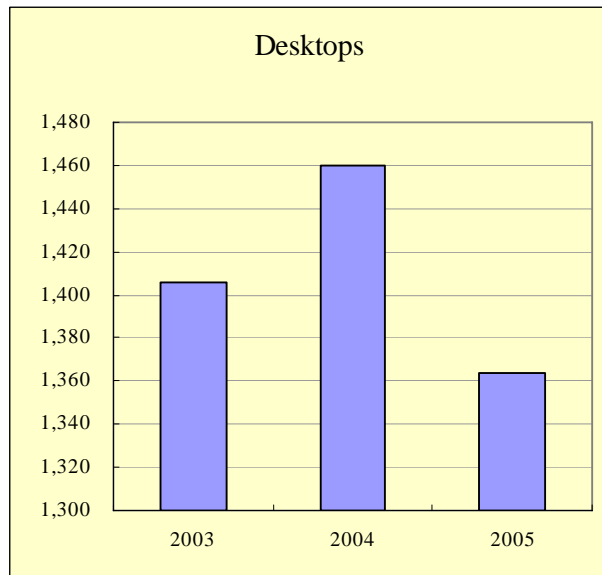
	2003	2004	2005
Desktops	2,475	2,373	3,436
Portables	2,016	2,550	2,839
iPod	345	1,306	4,540

Unit Sales by Product (thousands)

	2003	2004	2005
Desktops	1,761	1,625	2,520
Portables	1,251	1,665	2,014
iPod	939	4,416	22,497

Net Sales (USD per unit)

	2003	2004	2005
Desktops	1,405	1,460	1,363
Portables	1,612	1,532	1,410
iPod	367	296	202





Balance Sheet



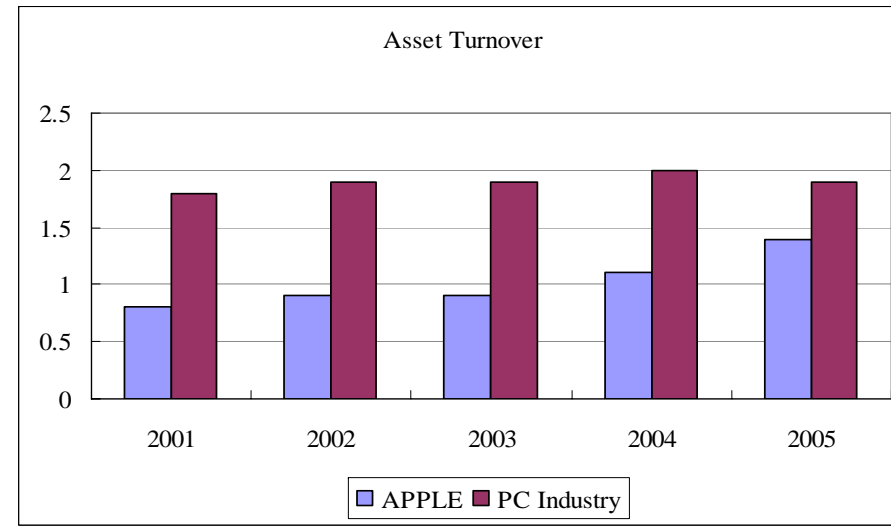
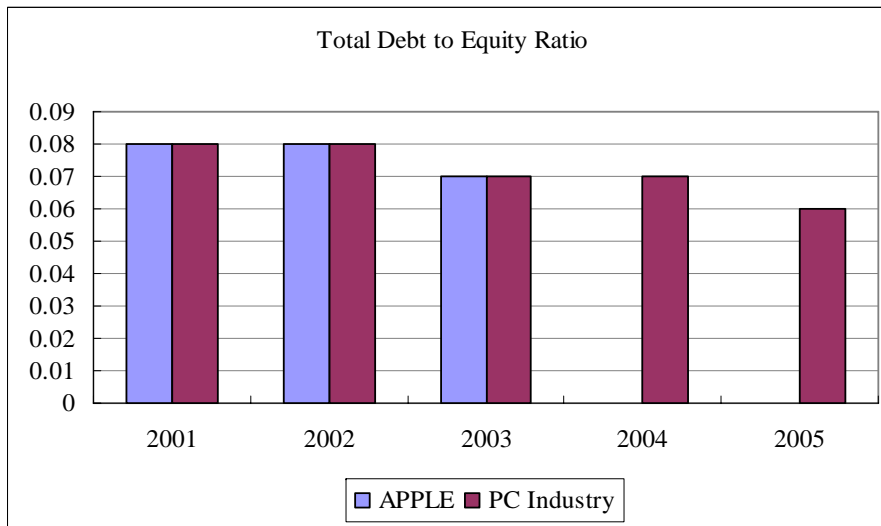
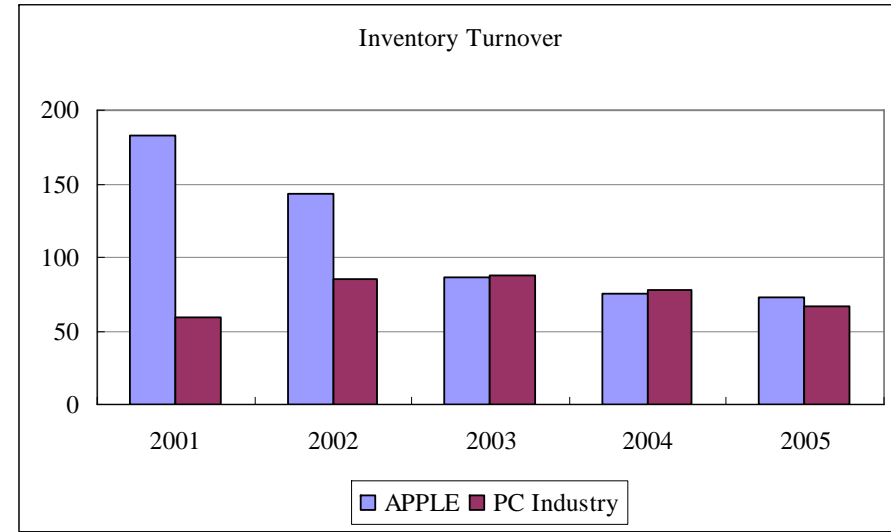
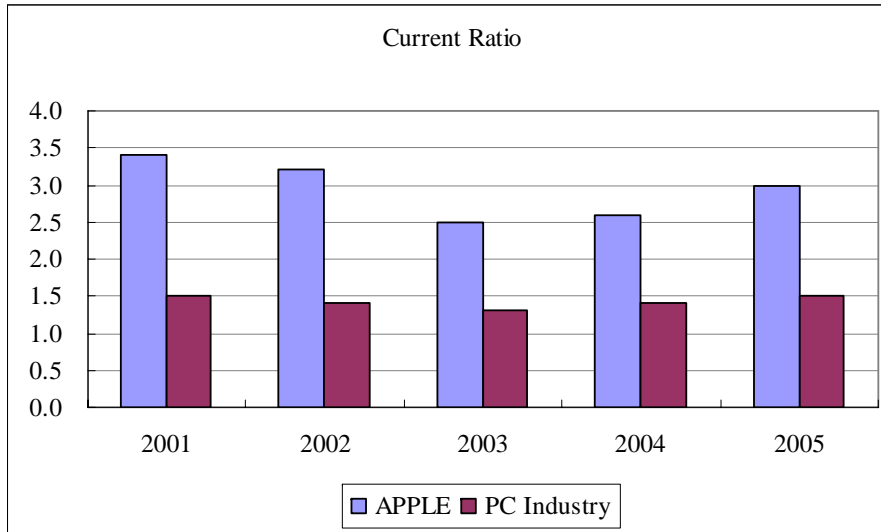
USD (thousand)

	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Assets										
Current Assets:										
Cash and Equivalents	3,491,000	2,969,000	3,396,000	2,252,000	2,310,000	1,191,000	1,326,000	1,481,000	1,230,000	1,552,000
Short-Term Investment	4,770,000	2,495,000	1,170,000	2,085,000	2,026,000	2,836,000	1,900,000	819,000	229,000	193,000
Accounts Receivable	895,000	774,000	766,000	565,000	466,000	953,000	681,000	955,000	1,035,000	1,496,000
Inventories	165,000	101,000	56,000	45,000	11,000	33,000	20,000	78,000	437,000	662,000
Current Deferred Income Taxes	331,000	231,000	190,000	166,000	169,000	162,000	143,000	182,000	259,000	342,000
Other Current Assets	648,000	485,000	309,000	275,000	161,000	252,000	215,000	183,000	234,000	270,000
Total Current Assets	10,300,000	7,055,000	5,887,000	5,388,000	5,143,000	5,427,000	4,285,000	3,698,000	3,424,000	4,515,000
Gross Fixed Assets (Plant, Prop. & Equip.)	1,481,000	1,298,000	1,174,000	1,057,000	924,000	700,000	729,000	824,000	1,195,000	1,348,000
Accumulated Depreciation & Depletion	664,000	591,000	505,000	436,000	360,000	387,000	411,000	476,000	709,000	750,000
Net Fixed Assets	817,000	707,000	669,000	621,000	564,000	313,000	318,000	348,000	486,000	598,000
Goodwill	69,000	80,000	85,000	85,000						
Acquired Intangible Assets, Net	27,000	17,000	24,000	34,000						
Other Assets	338,000	191,000	150,000	170,000	314,000	1,063,000	558,000	243,000	323,000	251,000
Total Non Current Assets	1,251,000	995,000	928,000	910,000	878,000	1,376,000	876,000	591,000	809,000	849,000
Total Assets	11,551,000	8,050,000	6,815,000	6,298,000	6,021,000	6,803,000	5,161,000	4,289,000	4,233,000	5,364,000
Liabilities And Shareholders' Equity										
Current Liabilities:										
Accounts Payable	1,779,000	1,451,000	1,154,000	911,000	801,000	1,157,000	812,000	719,000	685,000	791,000
Notes Payable	0	0	0	0	0	0	0	0	25,000	186,000
Short Term Debt	0	0	304,000	0	0	0	0	0	0	0
Accrued Expenses	1,705,000	1,229,000	899,000	747,000	717,000	776,000	737,000	801,000	1,108,000	1,026,000
Total Current Liabilities	3,484,000	2,680,000	2,357,000	1,658,000	1,518,000	1,933,000	1,549,000	1,520,000	1,818,000	2,003,000
Long Term Debt	0	0	0	316,000	317,000	300,000	300,000	954,000	951,000	949,000
Deferred Income Taxes	601,000	294,000	235,000	229,000	266,000	463,000	208,000	173,000	264,000	354,000
Total Non-Current Liabilities	601,000	294,000	235,000	545,000	583,000	763,000	508,000	1,127,000	1,215,000	1,303,000
Total Liabilities	4,085,000	2,974,000	2,592,000	2,203,000	2,101,000	2,696,000	2,057,000	2,647,000	3,033,000	3,306,000
Preferred Stock Equity	0	0	0	0	0	76,000	150,000	150,000	150,000	0
Common Stock	3,521,000	2,514,000	1,926,000	1,826,000	1,693,000	1,502,000	1,349,000	633,000	498,000	439,000
Retained Earnings	4,005,000	2,670,000	2,394,000	2,325,000	2,260,000	2,285,000	1,499,000	898,000	589,000	1,634,000
Deferred Stock Compensation	-60,000	-93,000	-62,000	-7,000	-11,000	0	0	0	0	0
Accu. Other Comprehensive Income (Loss)	0	-15,000	-35,000	-49,000	-22,000	244,000	106,000	-39,000	-37,000	-15,000
Total Equity	7,466,000	5,076,000	4,223,000	4,095,000	3,920,000	4,107,000	3,104,000	1,642,000	1,200,000	2,058,000
Total Liabilities & Stock Equity	11,551,000	8,050,000	6,815,000	6,298,000	6,021,000	6,803,000	5,161,000	4,289,000	4,233,000	5,364,000





Balance Sheet





Income Statement



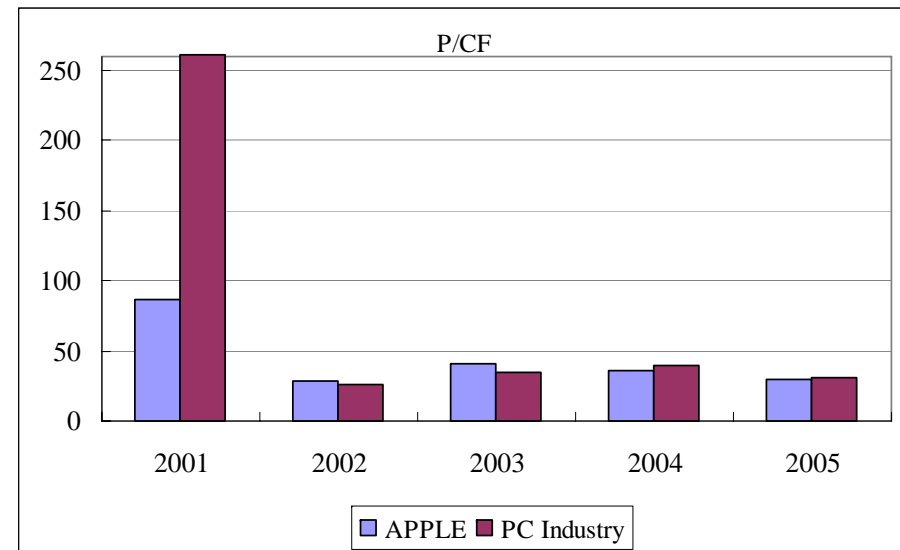
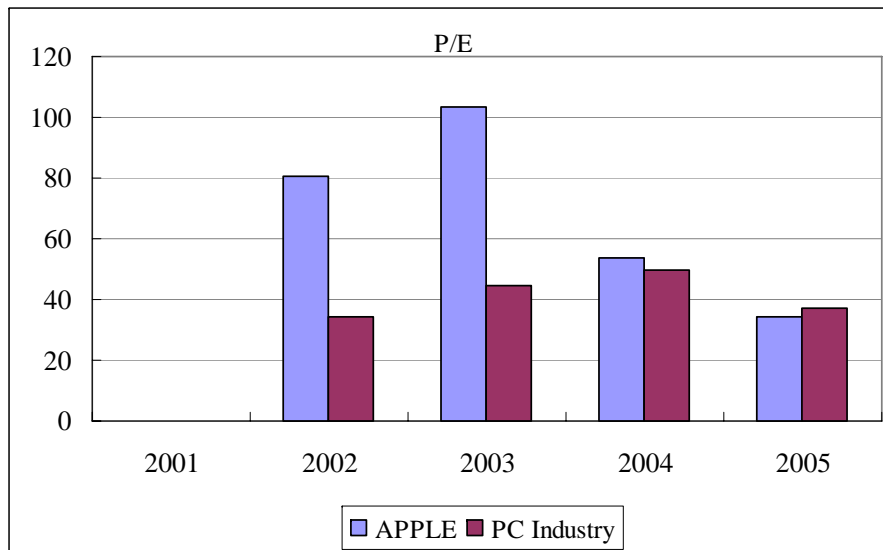
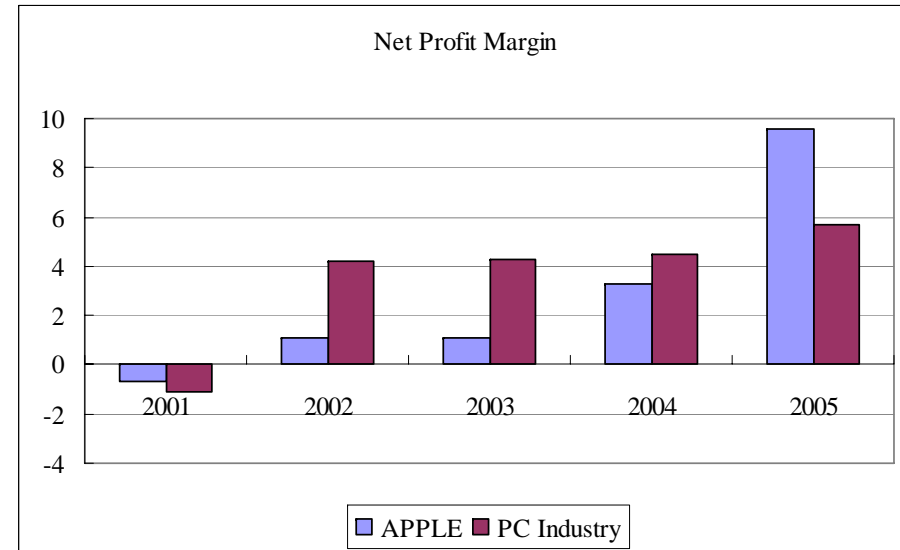
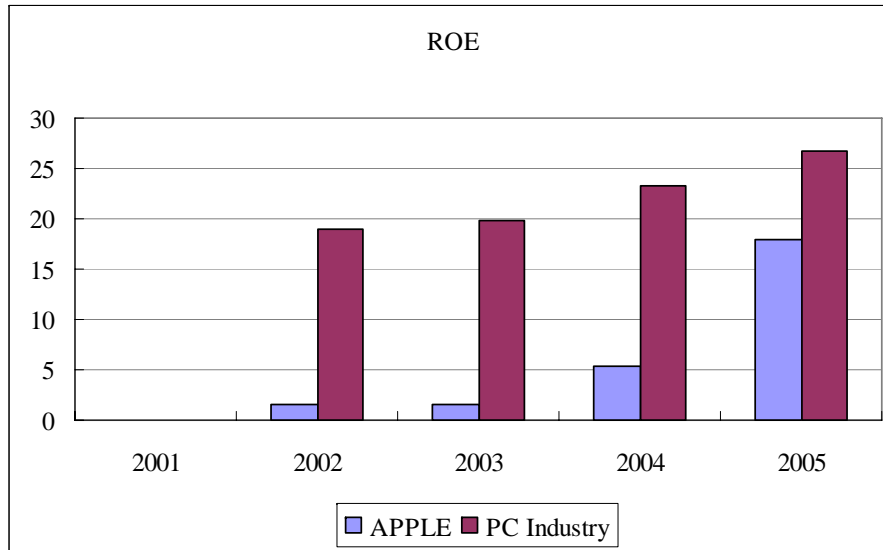
	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Net Sales	13,931,000	8,279,000	6,207,000	5,742,000	5,363,000	7,983,000	6,134,000	5,941,000	7,081,000	9,833,000
Cost of Sales (with Depreciation)	9,888,000	6,020,000	4,499,000	4,139,000	4,128,000	5,817,000	4,438,000	4,462,000	5,713,000	8,865,000
Gross Margin	4,043,000	2,259,000	1,708,000	1,603,000	1,235,000	2,166,000	1,696,000	1,479,000	1,368,000	968,000
Operating Expenses										
R & D	534,000	489,000	471,000	446,000	430,000	380,000	314,000	303,000	485,000	604,000
SG&A	1,859,000	1,421,000	1,212,000	1,111,000	1,138,000	1,166,000	996,000	908,000	1,286,000	1,568,000
Restructuring Costs	0	23,000	26,000	30,000	0	0	27,000	0	217,000	179,000
Total Operating Expenses	2,393,000	1,933,000	1,709,000	1,587,000	1,568,000	1,546,000	1,337,000	1,211,000	1,988,000	2,351,000
Operating Income (loss)	1,650,000	326,000	-1,000	16,000	-333,000	620,000	359,000	268,000	-620,000	-1,383,000
Other Income and Expense										
Gains On Non-Current Investments, Net	0	4,000	10,000	-42,000	90,000	367,000	230,000	0	0	0
Interest And Other Income. Net	165,000	53,000	83,000	112,000	218,000	203,000	87,000	28,000	25,000	88,000
Total Other Income and Expense	165,000	57,000	93,000	70,000	308,000	570,000	317,000	28,000	25,000	88,000
EBIT	1,815,000	383,000	92,000	86,000	-25,000	1,190,000	676,000	296,000	-595,000	-1,295,000
Provision for Income Taxes	480,000	107,000	24,000	22,000	-15,000	306,000	75,000	20,000	0	-479,000
Income Before Accounting Changes	1,335,000	276,000	68,000	64,000	-10,000	884,000	601,000	276,000	-595,000	-816,000
Cum. Effect of Acct Chg, Net of Income Taxes	0	0	1,000	0	12,000	0	0	0	0	0
Net Income	1,335,000	276,000	69,000	64,000	2,000	884,000	601,000	276,000	-595,000	-816,000

USD (thousand)





Income Statement



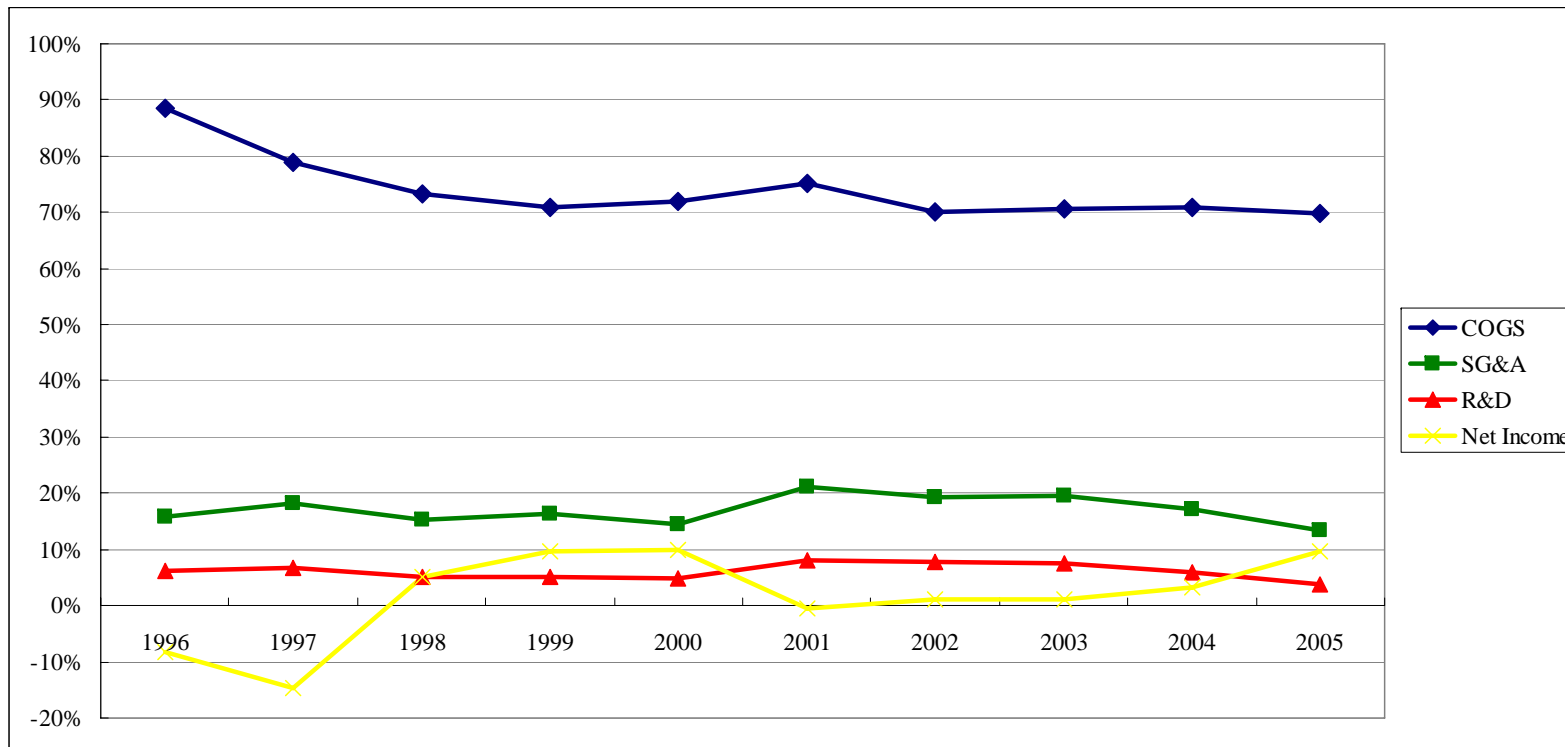


Cost Structure



% of Net Sales

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
COGS	88.6%	79.0%	73.2%	71.0%	71.8%	75.1%	70.0%	70.7%	70.9%	69.7%
SG&A	15.9%	18.2%	15.3%	16.2%	14.6%	21.2%	19.3%	19.5%	17.2%	13.3%
R&D	6.1%	6.8%	5.1%	5.1%	4.8%	8.0%	7.8%	7.6%	5.9%	3.8%
Tax	-4.9%	0.0%	0.3%	1.2%	3.8%	-0.3%	0.4%	0.4%	1.3%	3.4%
Other Operating Expenses	1.8%	9.4%	0.1%	0.4%	1.2%	0.2%	0.5%	0.4%	0.3%	0.0%
Depreciation	1.6%	1.7%	1.9%	1.4%	1.1%	1.9%	2.1%	1.8%	1.8%	1.3%
Net Income	-8.3%	-14.8%	5.2%	9.8%	9.8%	-0.5%	1.1%	1.1%	3.3%	9.6%



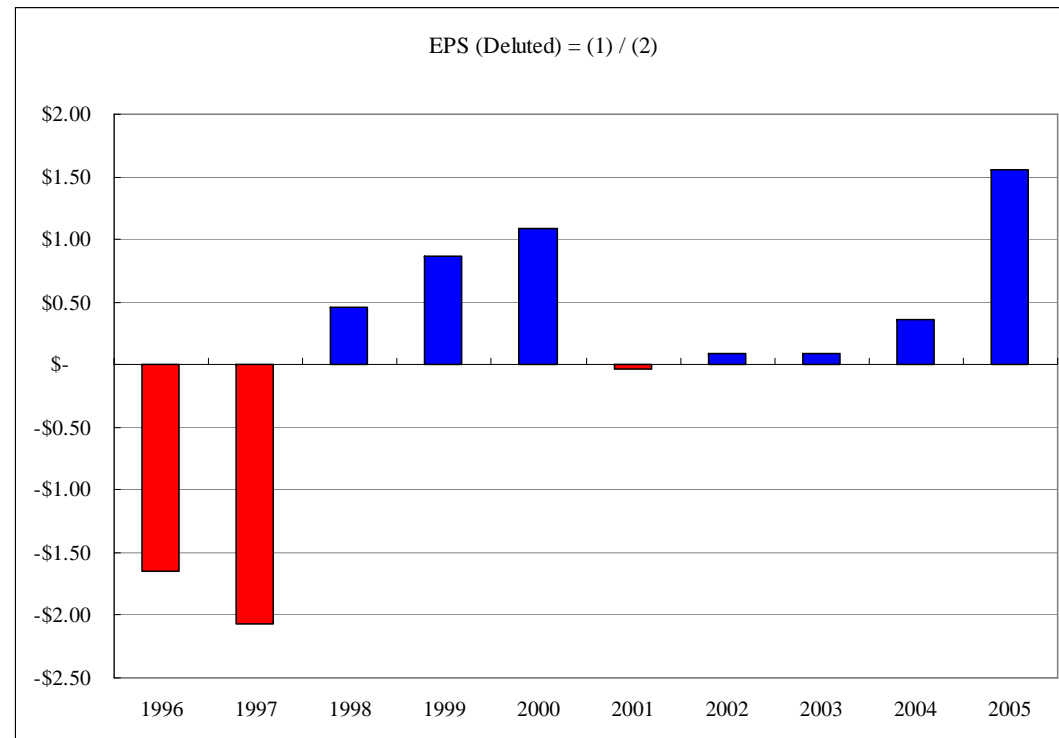
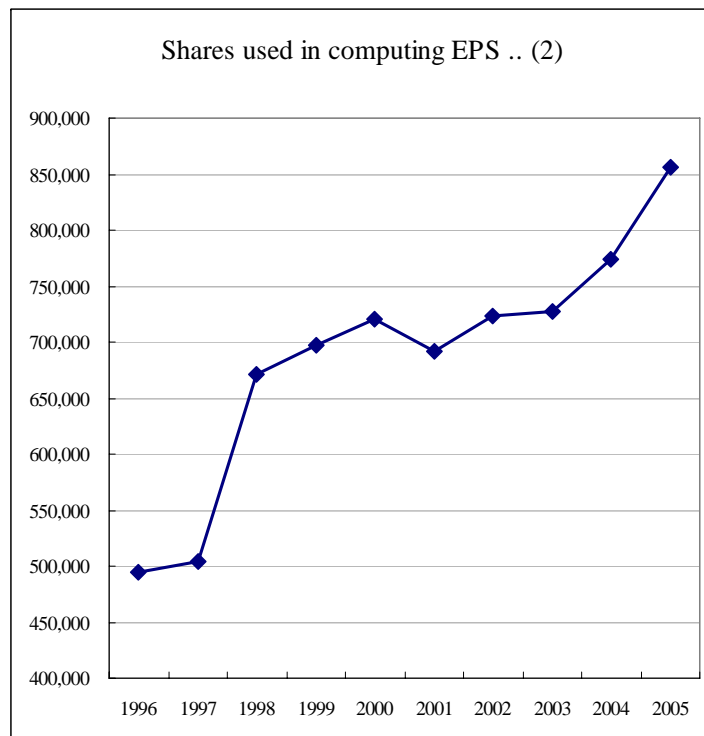


EPS



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Net Income .. (1)	- 816,000	- 1,045,000	309,000	601,000	786,000	- 25,000	65,000	69,000	276,000	1,335,000
Shares used in computing EPS .. (2)	494,936	504,248	671,668	696,656	720,648	691,226	723,570	726,932	774,622	856,780
EPS (Deluted) = (1) / (2)	-1.65	-2.07	0.46	0.86	1.09	-0.04	0.09	0.09	0.36	1.56
EPS (Deluted) reported in 10-K	-1.65	-2.07	0.53	0.59	1.09	-0.04	0.09	0.09	0.36	1.56

(Thousand)





Cash Flow Statement – 1/2



	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Cash and cash equivalents, beginning of the year	2,969	3,396	2,252	2,310	1,191	1,326	1,481	1,230	1,552	756
Operating Activities:										
Net income	1,335	276	69	65	-25	786	601	309	-1,045	-816
Cumulative effects of accounting changes, net of taxes			-1		-12					
Adjustments to reconcile net income to cash generated by operating activities:										
Depreciation and amortization	179	150	113	118	102	84	85	111	118	116
Stock-based compensation expense	42	33	16							
Non-cash restructuring	0	5	12							
Provision for (benefit from) deferred income taxes	52	20	-11	-34	-36	163	-35	1	-50	-437
Tax benefit from stock options	453	99	7							
Loss on sale of property, plant, and equipment	9	7	2	7	9	10			37	16
Gains on sales of short-term investment, net		-1	-21							
Gains on non-current investments, net		-4	-10	35	-88	-367	-230	-40		
Gain on forward purchase agreement			-6							
Unrealized loss on convertible securities					13					
Purchased in-process research and development				1	11			7	375	
Changes in operating assets and liabilities:										
Accounts receivable	-121	-8	-201	-99	487	-272	274	72	469	435
Inventories	-64	-45	-11	-34	22	-13	58	359	225	1,113
Other current assets	-150	-176	-34	-114	106	-37	-32	31	36	45
Other assets	-61	-39	-30	-11	12	20	-3	83	-4	-24
Accounts payable	328	297	243	110	-356	318	93	34	-107	-373
Accrued restructuring costs							2	-107	109	124
Other current liabilities	533	320	152	45	-60	176	-15	-85	-9	209
Cash generated by operating activities	2,535	934	289	89	185	868	798	775	154	408

USD (million)





Cash Flow Statement – 2/2



	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Cash generated by operating activities	2,535	934	289	89	185	868	798	775	154	408
Investing Activities:										
Purchase of short-term investments	-11,470	-3,270	-2,648	-4,144	-4,268	-4,267	-4,236	-2,313	-999	-437
Proceeds from maturities of short-term investments	8,609	1,141	2,446	2,846	4,811	3,075	3,155	1,723	963	440
Proceeds from sales of short-term investments	586	801	1,116	1,254	278	256				
Proceeds from sales of non-current investments		5	45							
Purchases of long-term investments					-1	-232	-112			
Proceeds from sale of property, plant and equipment							23	89	47	47
Purchase of property, plant, and equipment	-260	-176	-164	-174	-232	-142	-47	-46	-53	-67
Proceeds from sales of equity investment				25	340	372	245	24		
Cash used for business acquisitions				-52						
Cash used for acquisition of technology									-384	
Other	-21	11	33	-7	-36	-34	8	-20	-73	9
Cash (used for) generated by investing activities	-2,556	-1,488	828	-252	892	-972	-964	-543	-499	-8
Financing Activities:										
Decrease in notes payable to banks								-22	-161	-275
Increase in long-term borrowings										646
Payment of long-term debt		-300								
Proceeds from issuance of preferred stock									150	
Proceeds from issuance of common stock	543	427	53	105	42	85	86	41	34	39
Cash used for repurchase of common stock			-26			-116	-75			
Cash dividend										-14
Cash generated by (used for) financing activities	543	127	27	105	42	-31	11	19	23	396
Increase (decrease) in cash and cash equivalents	522	-427	1,144	-58	1,119	-135	-155	251	-322	796
Cash and cash equivalents, end of the year	3,491	2,969	3,396	2,252	2,310	1,191	1,326	1,481	1,230	1,552

USD (million)





Stock Options



- ❖ Assume all options exercised now at market price \$70
- ❖ Apple will need to pay $(\$70 - \$17.79) \times 73,221,000$
= \$3.8 billion

Options Outstanding as of Sep 24, 2005

Options Outstanding (thousands)	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price
10,092	4.29	\$ 7.33
14,954	5.65	\$ 9.76
2,284	5.19	\$ 10.31
11,726	5.36	\$ 10.89
9,151	5.1	\$ 11.37
9,622	5.39	\$ 16.52
4,791	6.38	\$ 36.04
10,601	6.94	\$ 46.75
73,221	5.53	\$ 17.79





DCF 1



- ❖ To forecast cash flow, the starting point is to forecast APPLE's sales in the next 6 years
- ❖ I believe iPod is overshooting => Assume 0% growth
- ❖ iTunes might not reach its full potential => Assume it will keep growing at 50%, 25%, 12.5%, 6.25% ...

Net Sales By Product (USD million)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Desktops	2,781	2,828	2,475	2,373	3,436	3,693	3,969	4,265	4,584	4,926	5,294
Portables	1,622	1,706	2,016	2,550	2,839	3,151	3,498	3,883	4,310	4,784	5,310
iPod	-	143	345	1,306	4,540	4,540	4,540	4,540	4,540	4,540	4,540
iTunes*	-	4	36	278	899	1,349	1,686	1,896	2,015	2,078	2,078
Peripherals	387	527	691	951	1,126	1,329	1,568	1,850	2,183	2,576	3,040
Software/Services	573	534	644	821	1,091	1,293	1,533	1,817	2,154	2,554	3,027
Total Net Sales	5,363	5,742	6,207	8,279	13,931	15,354	16,793	18,251	19,786	21,457	23,289

Desktops		1.02	0.88	0.96	1.45	1.07	1.07	1.07	1.07	1.07	1.07
Portables		1.05	1.18	1.26	1.11	1.11	1.11	1.11	1.11	1.11	1.11
iPod			2.41	3.79	3.48	1.00	1.00	1.00	1.00	1.00	1.00
iTunes*			9.00	7.72	3.23	1.50	1.25	1.125	1.0625	1.03125	1.00
Peripherals		1.36	1.31	1.38	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Software/Services		0.93	1.21	1.27	1.33	1.19	1.19	1.19	1.19	1.19	1.19
Total Net Sales		1.07	1.08	1.33	1.68	1.10	1.09	1.09	1.08	1.08	1.09





DCF 2



- ❖ The second step is to assume relationships between cost and revenue and construct the forecasted Income Statement

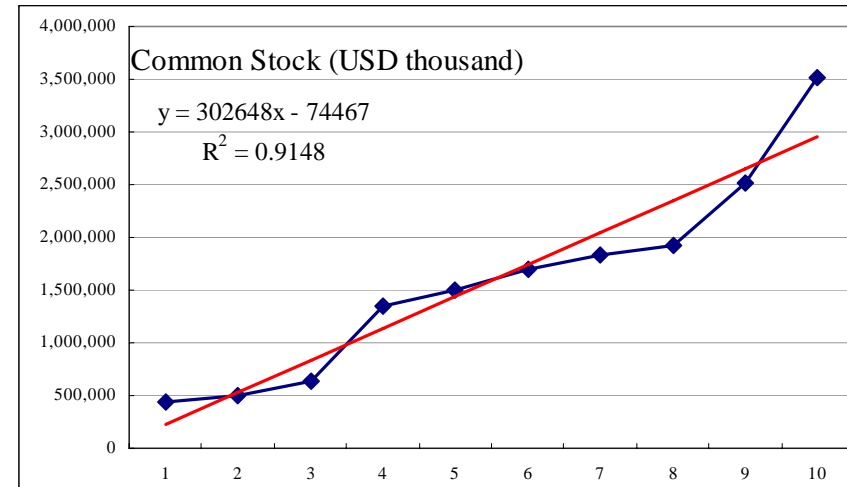
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Net Sales	5,363,000	5,742,000	6,207,000	8,279,000	13,931,000	15,354,440	16,793,021	18,251,427	19,785,625	21,457,464	23,288,858
Cost of Sales (with Depreciation)	4,128,000	4,139,000	4,499,000	6,020,000	9,888,000	10,901,653	11,921,952	12,957,325	14,046,505	15,233,403	16,533,573
Gross Margin	1,235,000	1,603,000	1,708,000	2,259,000	4,043,000	4,452,788	4,871,069	5,294,102	5,739,119	6,224,062	6,755,285
Operating Expenses											
R & D	430,000	446,000	471,000	489,000	534,000	588,563	643,706	699,610	758,418	822,503	892,703
SG&A	1,138,000	1,111,000	1,212,000	1,421,000	1,859,000	2,048,949	2,240,918	2,435,533	2,640,261	2,863,357	3,107,744
Restructuring Costs	0	30,000	26,000	23,000	0	-	-	-	-	-	-
Purchased In-Process R&D	11,000	1,000	0	0	0	-	-	-	-	-	-
Executive Bonus	0	-2,000	0	0	0	-	-	-	-	-	-
Total Operating Expenses	1,579,000	1,586,000	1,709,000	1,933,000	2,393,000	2,637,512	2,884,624	3,135,142	3,398,679	3,685,860	4,000,448
Operating Income (loss)	-344,000	17,000	-1,000	326,000	1,650,000	1,815,276	1,986,445	2,158,960	2,340,440	2,538,202	2,754,837
Other Income and Expense											
Gains On Non-Current Investments, Net	88,000	-42,000	10,000	4,000	0	-	-	-	-	-	-
Unrealized loss on convertible securities	-13,000	0	0	0	0	-	-	-	-	-	-
Interest And Other Income, Net	217,000	112,000	83,000	53,000	165,000	-	-	-	-	-	-
Total Other Income and Expense	292,000	70,000	93,000	57,000	165,000	176,203	192,712	209,449	227,055	246,240	267,257
EBIT	-52,000	87,000	92,000	383,000	1,815,000	1,991,479	2,179,157	2,368,409	2,567,495	2,784,442	3,022,094
Provision for Income Taxes	-15,000	22,000	24,000	107,000	480,000	536,123	586,647	637,595	691,191	749,595	813,572
Income Before Accounting Changes	-37,000	65,000	68,000	276,000	1,335,000	1,455,357	1,592,510	1,730,814	1,876,304	2,034,848	2,208,522
Cum. Effect of Acct Chg, Net of Income Taxes	12,000	0	1,000	0	0	-	-	-	-	-	-
Net Income	-25,000	65,000	69,000	276,000	1,335,000	1,455,357	1,592,510	1,730,814	1,876,304	2,034,848	2,208,522

R&D / Sales	8.0%	7.8%	7.6%	5.9%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%
SG&A / Sales	21.2%	19.3%	19.5%	17.2%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
Depreciation / Sales	1.9%	2.1%	1.8%	1.8%	1.3%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
COGS / Sales	75.1%	70.0%	70.7%	70.9%	69.7%	69.7%	69.7%	69.7%	69.7%	69.7%	69.7%
Other Operating Expenses / Sales	0.2%	0.5%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Income and Expenses / Sales	5.4%	1.2%	1.5%	0.7%	1.2%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
Effective Tax Rate	28.8%	25.3%	26.1%	27.9%	26.4%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%
Net Income / Sales	-0.5%	1.1%	1.1%	3.3%	9.6%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%





- ❖ **To construct the forecasted balance sheet, I assume most entries are a percentage of revenue and will not change over time**
- ❖ **The only exception is common stock – it keeps growing at its own pace in the last 10 years**



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Revenue (Net Sales)	5,363,000	5,742,000	6,207,000	8,279,000	13,931,000	15,354,440	16,793,021	18,251,427	19,785,625	21,457,464	23,288,858
Cash / Revenue	43.07%	39.22%	54.71%	35.86%	25.06%	25.06%	25.06%	25.06%	25.06%	25.06%	25.06%
Short-Term Inv / Revenue	37.78%	36.31%	18.85%	30.14%	34.24%	34.24%	34.24%	34.24%	34.24%	34.24%	34.24%
AR / Revenue	8.69%	9.84%	12.34%	9.35%	6.42%	6.42%	6.42%	6.42%	6.42%	6.42%	6.42%
Inventory / Revenue	0.21%	0.78%	0.90%	1.22%	1.18%	1.18%	1.18%	1.18%	1.18%	1.18%	1.18%
Current Deferred Income Tax / Revenue	3.15%	2.89%	3.06%	2.79%	2.38%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%
Other Current Asset / Revenue	3.00%	4.79%	4.98%	5.86%	4.65%	4.66%	4.66%	4.66%	4.66%	4.66%	4.66%
Net Fixed Assets / Revenue	10.52%	10.82%	10.78%	8.54%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%	5.86%
Other Assets / Revenue	5.85%	2.96%	2.42%	2.31%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%
AP / Revenue	14.94%	15.87%	18.59%	17.53%	12.77%	15.94%	15.94%	15.94%	15.94%	15.94%	15.94%
Accrued Expenses / Revenue	13.37%	13.01%	14.48%	14.84%	12.24%	13.59%	13.59%	13.59%	13.59%	13.59%	13.59%
Deferred Income Tax / Revenue	4.96%	3.99%	3.79%	3.55%	4.31%	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%
Common Stock (linear regression, 1996 x=1)	1,741,421	2,044,069	2,346,717	2,649,365	2,952,013	3,254,661	3,557,309	3,859,957	4,162,605	4,465,253	4,767,901
Deferred Stock Compensation	-0.21%	-0.12%	-1.00%	-1.12%	-0.43%	-0.43%	-0.43%	-0.43%	-0.43%	-0.43%	-0.43%
Working Capital	- 163,000	- 26,000	- 23,000	- 91,000	- 71,000	- 563,986	- 616,827	- 670,396	- 726,749	- 788,157	- 855,426
Increase in Working Capital	- 244,000	137,000	3,000	- 68,000	20,000	- 492,986	- 52,841	- 53,569	- 56,353	- 61,409	- 67,269
Increase in Other Assets	- 749,000	- 144,000	- 20,000	41,000	147,000	34,536	34,903	35,384	37,223	40,563	44,434





DCF 4



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Assets											
Current Assets:											
Cash and Equivalents	2,310,000	2,252,000	3,396,000	2,969,000	3,491,000	3,847,703	4,208,200	4,573,665	4,958,123	5,377,073	5,836,006
Short-Term Investment	2,026,000	2,085,000	1,170,000	2,495,000	4,770,000	5,257,389	5,749,961	6,249,322	6,774,634	7,347,075	7,974,148
Accounts Receivable	466,000	565,000	766,000	774,000	895,000	986,449	1,078,871	1,172,567	1,271,132	1,378,539	1,496,198
Inventories	11,000	45,000	56,000	101,000	165,000	181,859	198,898	216,172	234,343	254,144	275,835
Current Deferred Income Taxes	169,000	166,000	190,000	231,000	331,000	438,199	479,254	520,876	564,660	612,372	664,638
Other Current Assets	161,000	275,000	309,000	485,000	648,000	714,880	781,858	849,760	921,190	999,028	1,084,295
Total Current Assets	5,143,000	5,388,000	5,887,000	7,055,000	10,300,000	11,426,479	12,497,043	13,582,361	14,724,081	15,968,232	17,331,120
Gross Fixed Assets (Plant, Prop. & Equip.)	924,000	1,057,000	1,174,000	1,298,000	1,481,000						
Accumulated Depreciation & Depletion	360,000	436,000	505,000	591,000	664,000						
Net Fixed Assets	564,000	621,000	669,000	707,000	817,000	900,479	984,847	1,070,377	1,160,351	1,258,398	1,365,803
Goodwill		85,000	85,000	80,000	69,000	69,000	69,000	69,000	69,000	69,000	69,000
Acquired Intangible Assets, Net		34,000	24,000	17,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000
Other Assets	314,000	170,000	150,000	191,000	338,000	372,536	407,440	442,824	480,047	520,610	565,044
Total Non Current Assets	878,000	910,000	928,000	995,000	1,251,000	1,369,015	1,488,286	1,609,201	1,736,399	1,875,009	2,026,847
Total Assets	6,021,000	6,298,000	6,815,000	8,050,000	11,551,000	12,795,495	13,985,329	15,191,562	16,460,480	17,843,241	19,357,967
Liabilities And Shareholders' Equity											
Current Liabilities:											
Accounts Payable	801,000	911,000	1,154,000	1,451,000	1,779,000	2,447,175	2,676,454	2,908,894	3,153,413	3,419,869	3,711,754
Notes Payable	0	0	0	0	0	-	-	-	-	-	-
Short Term Debt	0	0	304,000	0	0	-	-	-	-	-	-
Accrued Expenses	717,000	747,000	899,000	1,229,000	1,705,000	2,086,549	2,282,041	2,480,227	2,688,713	2,915,903	3,164,775
Total Current Liabilities	1,518,000	1,658,000	2,357,000	2,680,000	3,484,000	4,533,724	4,958,496	5,389,121	5,842,125	6,335,771	6,876,529
Long Term Debt	317,000	316,000	0	0	0	-	-	-	-	-	-
Deferred Income Taxes	266,000	229,000	235,000	294,000	601,000	632,584	691,852	751,937	815,144	884,021	959,473
Total Non-Current Liabilities	583,000	545,000	235,000	294,000	601,000	632,584	691,852	751,937	815,144	884,021	959,473
Total Liabilities	2,101,000	2,203,000	2,592,000	2,974,000	4,085,000	5,166,308	5,650,347	6,141,057	6,657,269	7,219,793	7,836,002
Preferred Stock Equity	0	0	0	0	0	-	-	-	-	-	-
Common Stock	1,693,000	1,826,000	1,926,000	2,514,000	3,521,000	3,254,661	3,557,309	3,859,957	4,162,605	4,465,253	4,767,901
Retained Earnings	2,260,000	2,325,000	2,394,000	2,670,000	4,005,000	4,440,656	4,850,000	5,269,155	5,725,822	6,250,612	6,854,369
Deferred Stock Compensation	-11,000	-7,000	-62,000	-93,000	-60,000	66,131	72,327	78,608	85,216	92,416	100,304
Accu. Other Comprehensive Income (Loss)	-22,000	-49,000	-35,000	-15,000	0	-	-	-	-	-	-
Total Equity	3,920,000	4,095,000	4,223,000	5,076,000	7,466,000	7,629,186	8,334,982	9,050,504	9,803,211	10,623,448	11,521,966
Total Liabilities & Stock Equity	6,021,000	6,298,000	6,815,000	8,050,000	11,551,000	12,795,495	13,985,329	15,191,562	16,460,480	17,843,241	19,357,967



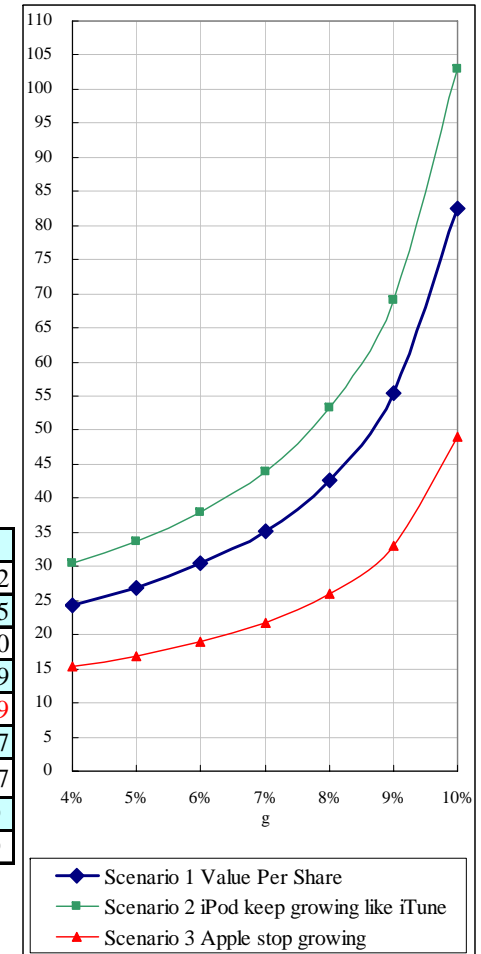


DCF 5



- ❖ **Rm = S&P500 yearly return 1995~2005 = 9.52%**
- ❖ **Beta = 1.4106 (2001~2005 monthly return vs S&P500)**
- ❖ **Rf = 3.99% (US 3-mth T-Bill on 30-DEC-2005)**
- ❖ **Required Rate of Return on Equity = 11.8%**
- ❖ **g = 4% Value Per Share = \$24.4**
- ❖ **Current stock price implies g ≈ 9.7%**

	2006	2007	2008	2009	2010	2011
NI (Net Income)	1,455,357	1,592,510	1,730,814	1,876,304	2,034,848	2,208,522
NCC (Non Cash Charge)	199,608	218,309	237,269	257,213	278,947	302,755
Interest Expense	0	0	0	0	0	0
FCInv	370,989	405,748	440,986	478,054	518,449	562,699
WCInv	-492,986	-52,841	-53,569	-56,353	-61,409	-67,269
FCFF=NI+NCC+[Int*(1-tax rate)]-FCInv-WCInv	1,776,961	1,457,912	1,580,665	1,711,816	1,856,754	2,015,847
Terminal Value = $FCFF_{t+1} / (r - g)$						25,888,607
Discount Factor	0.8946	0.8002	0.7159	0.6404	0.5729	0.5729
PV	1,589,601	1,166,680	1,131,542	1,096,220	1,063,666	14,830,629
Value of Firm	20,878,337					
Shares used in computing 2005 EPS	856,780					
Value Per Share	24.4					





Historical Price





Fisher's 'four dimensions'



- ❖ Superiority in production, marketing, research and financial skills
 - Excellent in marketing, research
 - Good financial strength
- ❖ The people factor
 - Steve Jobs
- ❖ Investment characteristics of some businesses
 - The best one in industry
- ❖ The price of investment
 - Current price is too high





Recommendation



SELL

