Case Study 1

"Microsoft's Financial Reporting Strategy"

Harvard case number 9-100-027, Professors Dawn Matsumoto and Robert Bowen

1 Difference between Market and Book value of equity

From Exhibit 1 (Financial performance since initial public offering) in the article, it can be inferred that Microsoft achieved consistently increasing growth in revenues from $140M to around $20B and net income from $24M to around $8B, from years 1985 to1999. This tremendous growth may be one of the reasons for the difference in market value and book value of its equity.

Next, it can be seen from the company's financial statements that the ratio of the current assets to the non-current assets has always been greater than 1, implying a good liquidity of the firm. More specifically, the ratio of around 1.2 indicates that a major portion of its assets is liquid. This might also be a reason for investors' valuation of the share at $85 compared to its original value of $25, thus contributing to the difference in equities.

Third, for the year 1999, the market value of each share was around $85, which grew from around $25 in 1986. But the book value of equity is based on the amount of money raised from issuing stocks over the period from 1986 to 1999. This is a likely cause for the difference between the two equities.

Also, in general, ROCE is a measure of the rate that common shareholders are earning on their shares. Companies that generate high returns relative to their shareholder's equity are companies that create substantial assets for each dollar invested. These businesses are more than likely self-funding companies that require no additional debt or equity investments. A look at the ROCE for Microsoft over the period, (6.Appendix), suggests that the company is highly capable of generating profits. Another indicator of ability of producing high profit margins is the Asset Turnover. This ratio has been consistently low (and fell from 0.82 in 1997 to 0.53 in 1999) over the three-year period ending 1999. Further, from the company's website the measures of reported Earnings Per Share (EPS) is as follows, which has grown tremendously in 1999:

	1997	1998	1999
Basic EPS	0.36	0.46	0.77
Diluted EPS	0.33	0.42	0.71

All these might have invited more investors and also help the market value of the stock in 1999 to rocket to more than three times of its initial value in1985.

2 Effects of Software Capitalization

By writing down research and development costs as expenses as and when they occur, instead of following SFAS No. 86, Microsoft attempted not to capitalize/convert the expenses incurred after the technological feasibility point.

Effects of this:

- Increase in expenses due to R&D and hence decrease in Net income on their Income statement
- If capitalized, the capitalized amount will be conceived or realized as an asset on Balance sheet. Hence, on Balance sheet, Microsoft's assets were of lower worth.

2.a Effect on financial statements

2.a.1 Income statement

	1997	1998	1999		1997	1998	1999
Revenue	11936	15262	19747	**Revenue**	11936	15262	19747
Operating Expenses				**Operating Expenses**			
Cost of Revenue	2170	2460	2814	**Cost of Revenue**	2170	2460	2814
R & D	1863	2601	2970	**40% of R&D**	745.2	1040.4	1188
				60% of previous year's R&D distributed to next 2 years	0	558.9	1339.2
Acquired in-process tech		296		**Acquired in-process tech**		296	
Sales and Marketing	2411	2828	3231	**Sales and Marketing**	2411	2828	3231
General and Administrative	362	433	689	**General and Administrative**	362	433	689
Other Expenses	259	230	115	**Other Expenses**	259	230	115
Total Operating Expenses	7065	8848	9819	**Total Operating Expenses**	5947.2	7846.3	9376.2
Operating Income	4871	6414	9928	**Operating Income**	5988.8	7415.7	10370.8
Investment Income	443	703	1803	**Investment Income**	443	703	1803
Noncontinuing Income	0	0	160	**Noncontinuing Income**	0	0	160

Income before taxes	5314	7117	11891	**Income before taxes**	6431.8	8118.7	12333.8
Provision for taxes	1860	2627	4106	**Provision for taxes (neglecting taxes**	1860	2627	4106
Net Income	3454	4490	7785	**Net Income**	4571.8	5491.7	8227.8
				Increase in Net Income (by distributing 60% of R&D expenses over next 2 years)	1117.8	1001.7	442.8

WorkSheet 1: Microsoft's Revised Income Statement with capitalized R&D expenses

From the revised Income statement (WorkSheet 1), it can be seen that if 60% of the R&D expenses are capitalized and amortized for next 2 years then the Net income will increase by $1117.8 Million, $1001.7Million and $442 Million in years 1997, 1998 and 1999 respectively.

2.a.2 Balance sheet

	1997	1998	1999	1997	1998	1999
Current assets				**Revised Calculations**		
Cash and short term Investments	8966	13927	17236	8966	13927	17236
Accounts receivable	980	1460	2245	980	1460	2245
Others	427	502	752	427	502	752
Total Current Assets	10373	15889	20233	10373	15889	20233
Property and Equipment	1465	1505	1611	1465	1505	1611
Equity investments	2346	4703	14372	2346	4703	14372
Other Assets	203	260	940	203	260	940
R&D Capitalized Asset				**1117.8**	**2119.5**	**3121.5**
Total assets	14387	22357	37156	15504.8	24477.5	40277.5
Liabilities and shareholders' equity						
Current Liabilities:						
Accounts Payable	721	759	874	721	759	874
Accrued Compensation	336	359	396	336	359	396
Income taxes Payable	466	915	1607	466	915	1607
Unearned Revenue	1418	2888	4239	1418	2888	4239
Others	669	809	1602	669	809	1602
Total Current Liabilities	3610	5730	8718	3610	5730	8718
Commitments and Contingencies						
Stock Holder's Equity						
Convertible preferred stock	980	980	980	980	980	980
Common stock and paid in capital	4509	8025	13844	4509	8025	13844
Retained earnings	5288	7622	13614	5288	7622	13614

Retained Income due to R&D Capitalization (Saving due to capitalization - Previous years' amortization)					**1117.8**	**2120.5**	**3122.5**
Total shareholder's equity	10777	16627	28438		11894.8	18747.5	31560.5
Total Liabilities and stockholders' equity	14387	22357	37156		15504.8	24477.5	40277.5

Worksheet 2: Microsoft's Revised Balance Sheet with Capitalized R&D Expenses

From the revised Balance sheet calculations (Worksheet 2), it can be seen that capitalizing and amortizing the 60% of R&D expenses will be represented as R&D capitalization asset. The accrued value of this asset equals to $1117.8M, $2119Million and $3121Million in years 1997, 1998 and 1999 respectively.

2.b Possible Reasons behind Microsoft's decision

- The revised calculation for Balance sheet and Income statements show that had not Microsoft adopted its new policy the actual revenue and asset values would have been higher.
- Due to its new policy, Microsoft was able to report low revenues in all quarters and hence low net income.
- It can be inferred from Microsoft's Balance sheet that the non-current assets are property and equipment, Equity Investments and other assets, which total to $17 Billion. Out of this amount, $14.4Billion is investment in Equity, which can be taken as liquidity. The rest, $2.5 Billion, is their non-current assets. Therefore, their current to non-current asset ratio is around 14, which is outstanding. If Microsoft capitalizes the R&D expenses after technological feasibility point, then this capitalized amount would be written as an asset. This will increase their asset values. In addition, this asset will be realized/conceived as intangible and non-current asset, which are not highly appreciated by investor or creditors. By doing so will decrease Microsoft's current to non-current asset ratio and increase investors' risk.
- The analysts' future expectations will be based on the generated revenue and net income. Analytics future expectations were cut short by these low revenue and net income and Microsoft was successful consistently in reaching analysts future expectation without any problems.

3 Revenue recognition policy

3.a Possible Effects on financial statements

Year	Quarter	End-of-Quarter Unearned Revenue Balance	*Delta from previous quarter*	Revenue with Revenue Recognition Policy	Revenue without Revenue Recognition Policy
1995:					
	Q1	-		1,270	1,270
	Q2	-		1,516	1,516
	Q3	-		1,627	1,627
	Q4	-		1,662	1,662
1996:					
	Q1	307	*0*	2,085	2,085
	Q2	495	*188*	2,287	2,475
	Q3	545	*50*	2,311	2,361
	Q4	560	*15*	2,367	2,382
1997:					
	Q1	651	*91*	2,405	2,496
	Q2	1,013	*362*	2,808	3,170
	Q3	1,285	*272*	3,365	3,637
	Q4	1,418	*133*	3,358	3,491
1998:					
	Q1	1,671	*253*	3,334	3,587
	Q2	2,038	*367*	3,792	4,159
	Q3	2,463	*425*	3,984	4,409
	Q4	2,888	*425*	4,152	4,577
1999:					
	Q1	3,133	*245*	4,193	4,438
	Q2	3,552	*419*	5,195	5,614
	Q3	4,195	*643*	4,595	5,238
	Q4	4,239	*44*	5,764	5,808
TOTAL Revenue				**62,070**	**66,002**

Worksheet 3: Revenue Calculations with and without Microsoft's 1996 Revenue Recognition

3.b Possible Factors affecting the policy choice

By adopting to choose some part (20%) of the revenue generated as unearned revenue, Microsoft was successful to reserve cash for its future expenses. In addition, this unearned revenue can be distributed across next few quarters and hence can help normalize any fluctuations in revenue generation (particularly any future downward slopes). This phenomenon can be seen from the exhibit 6 that their revenue was consistently increasing with each quarter.

Particularly, with the recognition of only 80% at the time of sale, Microsoft was able to manage expectations by lowering Wall Streets projections of earnings, which are usually based on the previous quarter earnings. This allowed Microsoft not only to meet the expectations, but also to surpass them. Microsoft was also able to smooth out its earnings curve by having a small store of earnings that were steadily coming into the company. This helped produce the appearance of a much steadier growth which would lead the investors, especially those trying to avoid or reduce risky investments, into believing that the company was a safe purchase. Total revenues for Microsoft for 1995 through 1999 with the adopted revenue recognition policy totals to about $62 billion. So if revenue is recognized all at the same time, there is an additional $4 billion of revenue Microsoft must account for. This would factor into higher expectations of investors and also force Microsoft to pay taxes on an additional amount of revenue.

Overall, it appears that the motive behind the accounting practice of the company has been perception management – on the investors, analysts and probably its own employees.

4 Overall Impact of the above accounting practices

The overall impact of Microsoft's policies was beneficial to the company in several ways. The company appeared to have a much smoother growth curve which allowed investors to feel secure in their investment returns. It also helped manage the expectations of the Wall Street analysts and kept projections to a manageable level which Microsoft easily met. This continued the cycle of investment security and smooth growth. Finally, and this may be the one of the more questionable practices, by recognizing revenue as they did, their earned revenue appeared to be about $4 billion less than it could have been. This could have also reduced the level of taxes Microsoft would pay on their annual revenue.

Moreover, looking at the Microsoft's current ratio with and without the unearned revenue adjustments, (6.Appendix), for the years 1997-1999, it can be inferred that the latter ratio has been higher and more fluctuating than the former. By using unearned revenue recognition policy, Microsoft was successful to employ window dressing technique and show consistent and falling current ratio, which is in contract to the actual figures and their variations. In addition, decreasing current ratio had resulted in lower expectations for the future thereby making it easier for Microsoft to form the reputation of consistently exceeding the expectation.

5 Why was SEC concerned

By deferring the revenue recognition, Microsoft was avoiding the tax payment for that revenue. This amount grew and accumulated to $4.2 Billion. Though the revenue was received and available in the form of cash, Microsoft is deferring the recognition of this revenue and subsequently the payment of taxes on it. Further the company could potentially use this as an investment or financing source and hence can reap the benefits equivalent to having a cash reserve of $4.2B but at no capital/user cost.

In addition, by choosing to write down all R&D costs as expenses, including those incurred after technological feasibility point, Microsoft increased its expenses. Had these expenses been capitalized, they would have been amortized in the following years. This way also the company could have realized the tax benefits – but over the future amortizing periods. Thus by not capitalizing R&D expenses, Microsoft has effectively used all its future benefits in advance.

6 Appendix

Health Indicators	1997	1998	1999
Current Ratio	2.873407	2.772949	2.32083
Current Ratio without Unearned Earnings	4.732208	5.590781	4.517303
Operating Cash to Current Liabilities Ratio	1.553935	1.473233	1.388427
Total Liabilities to Total Equity Ratio	0.250921	0.256296	0.234632
Current Assets to Non-current Assets	2.584205	2.456555	1.195592
Average Stockholder's Equity	3716.5	6267	10934.5
Net Income – Preferred Dividends	3439	4462	7757
ROE	0.925333	0.711983	0.709406
Asset Turnover	0.829638	0.68265	0.531462

Note: As Microsoft does not seem to have noncurrent liabilities, total current liabilities are the same as Total Liabilities.