

M9.1. Analysis of the Equity Statement, Hidden Losses, and Off-Balance-Sheet Liabilities: Microsoft Corporation

This case requires the student to reformulate and analyze Microsoft's equity statement and then deal with the question of omitted (hidden) expenses. The accounting for these expenses (or lack of it) leads to distortions. The student discovers that many of Microsoft's costs of acquiring expertise are not reported under GAAP. The student also understands that there are omitted liabilities for these costs and is introduced to the notion of contingent liabilities and the option overhang.

The case is a little old (200) but as the advantage of covering most of the issues that arise with the statement of shareholders' equity. Note that the accounting is not Microsoft's fault: They are accounting according to GAAP.

The Reformulated Statement of Shareholders' Equity

To get things going, reformulate the equity statement as is, without the consideration of hidden dirty-surplus items:

MICROSOFT CORPORATION
Reformulated Equity Statement: Before Dealing with Hidden Losses!
Nine months ended, March 31, 2000

Balance, beginning of period		\$27,458
<i>Transactions with Shareholders</i>		
Share issues	\$2,843	
Share repurchases	<u>4,872</u>	(2,029)
Tax benefit of shares issues for options		4,002
<i>Comprehensive Income</i>		
Net income	\$7,012	
Unrealized investment gains	2,724	
Translations gains	166	
Preferred dividends	<u>(13)</u>	<u>9,889</u>
Balance, end of period		\$39,320

Notes: Tax benefits from options are in a limbo line here. Microsoft treats these as paid-in capital --- as if the tax savings are cash raised from the share issue. But see later for the treatment of these tax benefits as a reduction in the before-tax stock option compensation expense.

Put warrants have been taken out of the statement because they are a liability. See the answer to Question C below. Accordingly, the closing balance of shareholders' equity has been restated.

Answering the Questions

- A. Net cash paid to shareholders = \$2,029 million
- B. Comprehensive income = \$9,889million. But this is the reported comprehensive income before hidden expenses. See later.
- C. Put warrants and other agreements to put shares to the corporations (put options and forward share purchase agreements) are options sold to banks and private investors that gives them a right to have shares repurchased by the firm at a

specified exercise price in the future. If the option is exercised, the firm can either pay cash for the repurchase or have a net settlement in shares for the same value. The option holder pays for the options (the option premium).

Prior to FASB Statement 150 in 2003, the accounting worked as follow. If settlement is in cash, GAAP recorded the premium paid as a liability. If settlement is in shares (as here), the amount of the premium was entered as equity. But cash or kind, the value is the same. All put options result in a contingent liability to the current shareholders so cannot be part of their equity. Accordingly, the reformulated statement above takes the \$472 million in option premium out of equity (and implicitly classifies it as a liability). FASB 150 eliminated the difference: All put options and warrants are treated as liabilities, whether settled in cash or shares.

When the options lapse, GAAP reclassifies the premium received as a share issue (even though no shares are issues), and extinguished the liability if one was recorded under a cash settlement. However, the amount of the premium is a gain to shareholders and should be recorded as such as part of comprehensive income.

Why would Microsoft issue put warrants? It must feel that its stock price is undervalued, so it can pocket the premium as the stock price rises. The warrants may be part of a stock repurchase program, with the firm pegging the repurchase price in advance of the repurchase as a hedge against stock price increases. Firms can use these put options for more doubtful purposes, effectively borrowing

- against future settlement in stock but with the loan off balance sheet. See Exercise E9.13 on Household International.
- D. When options are exercised, GAAP records the consequent share repurchase for the amount of cash paid, with no loss recognized. However, the amount paid for the shares is greater than their current market price (otherwise the warrant holder would not have exercised), so the firm repurchases at a loss. See the Dell example in the chapter. The appropriate clean-surplus accounting records the share repurchase at market value and the difference between cash paid and market value as a loss on exercise of warrants (and part of comprehensive income). See Box 9.3.
- E. No, repurchases do not reverse dilution. They give the appearance of reversing dilution if the number of shares repurchased equals the number issued in the exercise of options, leaving shares outstanding unchanged. But issuing shares at less than market price results in dilution of the current shareholder's value. Repurchasing them at market price has no effect of shareholder value in an efficient market, so cannot recover the value lost.

In Microsoft's case, the firm was repurchasing stock in 2000 at bubble prices. So they were actually furthering the dilution, for buying back shares at greater than fair value loses values for the current shareholders. They were well advised to stop the repurchases.

- F. The loss is the difference between market price and exercise price, net of the tax benefit from deducting this difference on the tax return. As the tax rate is known and the tax benefit is reported, Method 1 in the chapter can be applied:

Stock option expense	\$4,002/0.375	\$10,672
Tax benefit		<u>4,002</u>
After-tax stock option expense		<u>\$6,670</u>

This expense could have been entered in the reformulated equity statement, as follows:

Balance, beginning of period		\$27,458
<i>Transactions with Shareholders</i>		
Share issues (2,843 +10,672)	\$13,515	
Share repurchases	<u>4,872</u>	8,643
<i>Comprehensive Income</i>		
Net income	\$7,012	
Unrealized investment gains	2,724	
Translations gains	166	
Preferred dividends	(13)	
Loss on exercise of stock options	<u>(6,670)</u>	<u>3,219</u>
Balance, end of period		\$39,320

The share issue is recorded here at market value (issue price plus the difference between issue price and market price), and the loss is recorded as part of comprehensive income. The appropriate journal entry is:

Cash	Dr.	2,843	
Loss on exercise of stock options	Dr.	10,672	
Common stock and paid in capital	Cr.		13,515

Microsoft is paying its engineers and managers with options and the appropriate accounting recognizes the (large) cost. There is quite a change to comprehensive income here.

Under FASB Statement No. 123R and IFRS no. 2 (published after the date for this case), an option expense is recorded at grant date as (unamortized) compensation and then amortized to income over a service period. However, the loss at exercise – the true loss – is not recognized: There is no settling up against the actual loss. This does raise a problem, however. Including the loss on exercise as part of comprehensive income (as in the reformulated statement above) may involve some double counting as some of the ultimate expense is recognized in net income. It is difficult to unravel this. See the discussion in the chapter.

- G. As options are issued to pay employees in operations, the expense – and the tax benefit from the expense – are operating items. Correspondingly, the cash flows should be classified as cash from operations. Of course, both the cash associated with the expense and the tax benefit should be included, with the cash for the expense being the “as if” cash paid by not receiving the full cash from the share issue: The firm essentially issued the shares at market value, then paid part of the proceeds to employees to help them purchase the shares.

After the EIFT rule, the tax benefit was classified as part of operations. So Microsoft’s 2001 cash flow for operations was reported as follows:

MICROSOFT CORPORATION

Cash Flows Statements
(In millions)(Unaudited)

	Nine Months Ended Mar. 31	
	2000	2001
Operations		
Net income	\$ 7,012	\$ 7,281
Cumulative effect of accounting change, net of tax	-	375
Depreciation, amortization, and other noncash items	945	972

Net recognized gains on investments	(1,078)	(943)
Stock option income tax benefits	4,002	1,271
Deferred income taxes	449	1,357
Unearned revenue	4,278	5,141
Recognition of unearned revenue from prior periods	(4,058)	(4,652)
Accounts receivable	(558)	(281)
Other current assets	(328)	(557)
Other long-term assets	(654)	(228)
Other current liabilities	(1,272)	107

Net cash from operations	8,738	9,843

Notice that, for the nine months in 2000 (on which the case is based), the \$4,002 million in tax benefits (reclassified in 2001) was 45.8% of cash from operations. Fast forward to 2005: From that year, the FASB returned to the old rule – report these tax benefits as part of financing activities.

H. The total tax reported was \$3,612 million on income in the income statement minus \$4,002 million in tax benefits from stock options. That is, taxes were negative. The amount of \$3,612 in the income statement results from allocating the taxes between the income statement and the equity statement.

So, yes, Microsoft did not pay taxes the income in the incomes statement, but that is appropriate for they did have a legitimate expense for wages paid through issuing shares to employees at less than market price. If Microsoft had recognized the compensation expense in the income statement, along with the tax benefit, the income statement would have looked as follows:

Income reported, before tax	\$10,624 million
Loss on exercise of stock options	<u>10,672</u>
Loss before tax	(48)
Taxes (\$3,612 – 4,002)	<u>(390)</u>
Net income	<u>\$ 342</u>

The negative income before tax draws a negative tax, as is usual (with the loss carried forward or back against income).

Note just one point, however. Taxes are allocated to income in other comprehensive income, so the unrealized investment gains of \$2,724 million and translation gains of \$166 million are after tax. So, on this income Microsoft pays taxes, recognized now as deferred taxes to be paid when the income enters its tax return.

About quality of income: if a firm is paying low taxes on a high income, it must be either (1) the firm is getting certain tax credits (for R&D, for example), or (2), it is recognizing expenses for taxes that it is not recognizing on its books (or recognizing revenue in its books that is not recognized for taxes). If the difference is for reason (2), there is a concern about the quality of its accounting earnings: Is the firm recognizing the correct revenues and expenses?

- I. Here are the concerns arising from the Stockholders' Equity footnote:
 - a. Share repurchases: Is the firm purchasing its own shares at the appropriate price?
 - b. Put warrants: there is a potential liability here because the put options might go into the money, requiring the firm to repurchase shares at more than the market price. As the strike prices ranged from \$69 to \$78 per share and the stock was trading at \$90 at the time, the options were out of the money. However, some of the expiration dates were up to December 2002 by which time the stock had dropped to \$56, so some options were subsequently exercised. When exercised, GAAP did not require Microsoft to record a loss. Not did it require the firm to book a contingent liability as these options went into the money. See Box 9.3 for the correct accounting.

- c. The convertible preferred stock results in a loss to shareholders, if converted, but the contingent liability for this loss is not recorded, nor is the actual loss recorded on conversion. So, when the preferreds were converted in 1999, the equity statement showed a substitution of common stock for preferred stock at the book value of the preferred stock (by the book value method), but no loss (that would have been recognized under the market value method).

In 1999, Microsoft's shares traded at an average price of \$88. With 14.091 million common shares issued (12.5×1.1273), common stock worth \$1,240 million was issued. As the carrying value of the preferred stock was \$980 million, the loss in conversion was \$260 million (unrecorded).

- J. The footnote tells you that Microsoft has an option overhang: As exercise prices are less than the current stock price of \$90, many options are in the money. The (contingent) liability to issue shares at less than market value for the outstanding options is simply their option value, calculated using a (modified) Black-Scholes valuation or similar method.

Chapter 14 illustrates how to do this and how to reduce an equity valuation for the amount of the option overhang. Students with some familiarity with option pricing models might make a stab at it using the parameters given in the option footnote. A floor valuation for the liability can be calculated as the difference between the current market price and the exercise prices:

Shares (millions)	Wtd-ave Exercise Price	Market Price	Per share Difference	Total Difference
133	4.57	90.00	85.43	11,362
104	10.89	90.00	79.11	8,227
135	14.99	90.00	75.01	10,126
96	32.08	90.00	57.92	5,560
198	63.19	90.00	26.81	5,308
<u>166</u>	89.91	90.00	0.09	<u>15</u>
<u>832</u>				<u>40,598</u>

Microsoft can deduct the amount in its tax return. So the after-tax liability is

$$\$40,598 \times 0.625 = \$23,374 \text{ billion}$$

The total amount of \$40.599 billion does not include option value (the calculation here is sometimes referred to as the “intrinsic value method”). However, although a floor on the valuation, it is large! Indeed, more than the total book value of shareholders’ equity.

The Borrowing in 2010

With \$36.8 million in “cash” (financial assets) on its balance sheet, Microsoft had no need to borrow. With no obvious investments that required cash, why was it borrowing? Borrowing at fair value does not add value, but therein lies the clue: Interest rates at the time were at a record low—Microsoft borrowed, mostly long-term, at interest rates well below 1% (less after-tax, of course). If the firm thought it might need to borrow in the future when interest rates were likely to be higher, it might see this an opportunity. In effect, it sees borrowing as “cheap,” that is, not a fair value.

The prospect of stock repurchases also gives a clue. Stock repurchases at fair value do not add value, but Microsoft may have considered its stock (at an

almost all-time low at the time of \$24) to be cheap. Borrowing (cheaply) and repurchasing (cheaply) can be seen as a pure arbitrage play: Issue debt cheaply and use the proceeds to buy cheap stock. The 5.3% increase in the market price on the announcement probably recognizes this.

Here are the financial statements for the case if need for presentation:

MICROSOFT CORPORATION	
Income Statements	
(in millions, except earnings per share)	
(Unaudited)	
	Nine Months Ended March 31, 2000
Revenue	\$17,152
Operating expenses	
Cost of revenue	2,220
Research and development	2,735
Sales and marketing	2,972
General and administrative	825
Other expenses (income)	<u>(13)</u>
Total operating expenses	<u>8,739</u>
Operating income	8,413
Investment income	2,055
Gains on sales	<u>156</u>
Income before income taxes	10,624
Provision for income taxes	<u>3,612</u>
Net income	<u>\$ 7,012</u>
Earnings per share:	
Basic	\$ 1.35
Diluted	\$ 1.27

Stockholders' Equity Statement (in millions) (Unaudited)

**Nine Months Ended
March 31, 2000**

Common stock and paid-in capital

Balance, beginning of period	\$13,844
Common stock issued	2,843
Common stock repurchased	(186)
Proceeds from sale of put warrants	472
Stock option income tax benefits	<u>4,002</u>
Balance, end of period	<u>20,975</u>

Retained earnings

Balance, beginning of period	13,614
Net income	7,012
Net unrealized investment gains	2,724
Translation adjustments and other	<u>166</u>
Comprehensive income	9,902
Preferred stock dividends	(13)
Common stock repurchased	<u>(4,686)</u>
Balance, end of period	<u>18,817</u>
Total stockholders' equity	<u>\$39,792</u>

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Other current liabilities	(1,272)	107
Net cash from operations	8,738	9,843

Range of Exercise Prices	Outstanding Options		
	Shares	Remaining Life (Years)	Weighted-Average Price
\$ 0.56–\$5.97	133	2.1	\$ 4.57
5.98–13.62	104	3.0	10.89
13.63–29.80	135	3.7	14.99
29.81–43.62	96	4.5	32.08
43.63–83.28	198	7.3	63.19
83.29–119.13	166	8.6	89.91

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