



Numbers 101: Restructuring Financial Statements

In strategy work it is useful to restructure a company's financial statements to accomplish two things: (1) to focus on the long-term rather than short-term financial structure and efficiency, and (2) to generate measures which are useful in valuation. To do this it is important to have internally consistent definitions of invested capital, free cash flow, and the cost of capital. The definitions used here are consistent with those given in *Valuation: Measuring and Managing the Value of Companies*, by Copeland, Koller, and Murrin, second edition, John Wiley & Sons, 1994. Refer to this useful reference for details on dealing with inflation, foreign exchange, pension plans, preferred stock, minority interests, etc.

ADJUSTING THE INCOME STATEMENT TO PRODUCE NOPLAT

NOPLAT is the key earnings concept. NOPLAT (Net Operating Profit Less Adjusted Taxes) is what the after-tax operating income would be were the company unlevered. The emphasis here is on the two qualifiers *operating* and *unlevered*. To arrive at NOPLAT we adjust both EBIT (earnings before interest and taxes) and Taxes. EBIT is not a technically defined term and is often not directly reported. Even when reported, it often includes interest income and amortization expense, which we wish to exclude. On most income statements, EBIT will be labeled Operating Income. In any event, our intention is to include operating income, but not interest income, and to avoid deducting interest, lease, and amortization expenses. Note that EBIT *does* include depreciation expense. To adjust the EBIT figure normally provided we must

- Add back to EBIT any amortization of goodwill expense that may be included in it. This is a non-cash non-deductible expense. It distorts the income available to investors.
- Subtract from EBIT any interest income. Interest income is non-operating income.
- Add back to EBIT any lease expenses that may be included in it. Lease expenses are like interest and should not be included in EBIT.

Next we must adjust the "Provision for Income Taxes" figure for these adjustments and for non-operating issues. The Cash Taxes on EBIT are computed by starting with the reported provision for taxes adjusting as follows:

- Subtract the portion of the tax provision that is deferred. Sometimes this amount is explicitly stated; other times one must look at the increase in deferred tax liability. The "Deferred Taxes" liability account accumulates the difference between cash taxes paid and taxes reported on the income statement. This difference normally arises because the company uses straight-line depreciation for reporting and accelerated depreciation for tax purposes. The increase in this liability in any year is the degree to which the income statement overstates the actual

cash taxes paid. Hence we add this increase to net income to undo this distortion. Sometimes it is necessary to combine both long and short-term deferred-tax accounts, and less frequently it is necessary to net deferred-tax liability accounts against deferred-tax asset accounts. Sometimes the effects of acquisitions render the increase in deferred tax liability meaningless for correcting taxes to a cash basis.

- Add the tax shield on interest expense ($T_m I$). Here, T_m is the marginal corporate income tax rate. This adjustment is necessary because taxes are computed after the deduction for interest expense.
- Add the tax shield on lease expenses.
- Subtract the taxes on interest income (to match the elimination of interest income from EBIT).
- Subtract taxes on non-operating (non-recurring) income (i.e., income from discontinued operations, unrelated subsidiaries, capital gains on sales, foreign-exchange gains). We wish to concentrate on operations and not count non-recurring non-operating income. If there are predictable recurring income items in non-operating income, they should probably be added to EBIT, in which case you should not adjust the tax provision for that amount.

ADJUSTING THE BALANCE SHEET TO PRODUCE INVESTED CAPITAL

The balance sheet adjustments are as follows:

- Subtract excess cash and/or marketable securities from current assets and from equity. The resulting current asset account is named *adjusted current assets*. Most companies require between 0.5% and 2% of sales in cash and/or marketable securities to support operations, each industry having its own norms. When much more than this amount is held, it should be removed from the balance sheet as it is not a "structural" policy and is not supporting business operations.
- Subtract goodwill from the appropriate asset account and from equity. Goodwill arises when firms pay more for acquisitions than book value. It is often useful to work with invested capital numbers based on eliminating goodwill, and alternate figures without this elimination.
- Move net deferred tax liabilities into the equity account.
- Move any interest-bearing debt (or capitalized leases) out of current assets and add to the long-term debt account. The remaining *adjusted current liabilities* are all non-interest bearing.
- Net adjusted current liabilities against adjusted current assets to produce adjusted working capital.
- Net the remaining Other Liabilities against the remaining Other Assets to give Net Other Assets.
- Capitalize any operating leases that have not been capitalized and add to both assets and liabilities.

To illustrate these adjustments, consider the 1997 and 1998 statements of Wal-Mart (Exhibit 6). These numbers have been taken directly from the company's 10K reports.

Exhibit 4

Calc. of Adj. Working Capital	1998	1997
Current Assets	19,352	17,993
Non-Interest Current Liab.	13,319	10,339
Adj. Working Capital	6,033	7,654

Turning to the other asset accounts the adjustments are to deduct the \$1,213 in goodwill from net PP&E for 1998, to move net deferred tax liability into the equity account, and to net other assets against other li-

abilities. The resulting adjusted asset accounts are shown in Exhibit 5. The sum of these accounts is Total Invested Capital.

Adjusting the rest of the balance sheet takes a few steps. The company's statements show a net deferred tax liability (net of deferred tax assets) of \$406 million in 1998 and \$35 million in 1997. Moving these amounts from the "Deferred Income Taxes and Other" accounts into equity, and removing \$1,213 in goodwill from 1998 equity, leave the equity accounts shown in Exhibit 5.

The goodwill stripped from equity is also removed from the PP&E account. In addition, Other Assets are netted against remaining Other Liabilities, removing the non-tax deferral other liabilities from the balance sheet. Finally, it is necessary to estimate the capitalized value of operating leases. Capital leases involve a transfer of some ownership rights and asset risk to the lessee, whereas operating leases do not. Companies will normally capitalize capital leases but do not do this with operating leases. We need to capitalize the operating

Exhibit 5

Adjusted Asset Accounts	1998	1997
Adj. Working Capital	6,033	7,654
PP&E (less goodwill)	20,256	18,333
Capital Lease Assets	2,137	1,991
Operating Leases	2,232	2,367
Net Other Assets	2,023	859
Total Invested Capital	32,681	31,204

Adjusted Liability Accounts	1998	1997
Debt (current + LT)	8,230	8,232
Capital leases (current + LT)	2,585	2,402
Operating leases	2,232	2,367
Minority Interest	1,938	1,025
Equity (less goodwill + Def. Tax Liab.)	17,696	17,178
Total Invested Capital	32,681	31,204

leases too when they are material. The generally accepted method for capitalizing a lease obligation is to discount the future stream of obligated payments at the company's marginal debt rate (accounting rules require the disclosure of the next 5 years of such obligated payments). In 1997, Wal-Mart reported its operating lease obligations for 1998-2002 and thereafter as totaling \$4744. Instead of discounting these payments, it is easier to work with the figures for capital leases and develop ratios applicable to the operating leases. Thus, Wal-Mart reported 1997 end-of-year capital lease obligations of \$4,814 million and it reported the discounted present value of these as \$2402—the capitalized value of the capital lease obligation. Thus, the ratio of present value to total obligation for capital leases was 0.499. Applying this to the operating lease obligation of \$4,744 gives $0.499 \times 4744 = \$2,367$, an estimate of the capitalized value of the operating lease obligations. This estimate is added to the balance sheet as both an asset and a liability.

The consequences of all these adjustments are shown in Exhibit 5.

Given these results the Return on Invested Capital for Wal-Mart in 1998 is $4524/31204 = 14.5\%$. Note that we use the previous year's ending capital as the denominator.

Exhibit 6

Wal-Mart Stores, Inc. (Amounts in millions)

CONSOLIDATED STATEMENTS OF INCOME		
(Fiscal years ended January 31,)	1998	1997
Revenue	119,299	106,178
Costs and Expenses:		
Cost of sales	93,438	83,510
Operating, selling and general and administrative expenses	19,358	16,946
Operating Income	6,503	5,722
Interest Costs:		
Debt	555	629
Capital Leases	229	216
Provision for Income Tax		
Current	2,095	1,974
Deferred	20	(180)
Minority Interest and Equity in Unconsolidated Subsidiaries	(78)	(27)
Net Income	3,526	3,056
CONSOLIDATED BALANCE SHEETS		
Assets		
Current Assets:		
Cash and cash equivalents	1,447	883
Receivables	976	845
Inventory	16,497	15,897
Prepaid expenses and other	432	368
Total Current Assets	19,352	17,993
Property, Plant and Equipment, at Cost:	27,376	23,182
Less accumulated depreciation	5,907	4,849
Net property, plant and equipment	21,469	18,333
Net property under capital leases	2,137	1,991
Deferred Taxes and Other Assets	2,426	1,287
Total Assets	45,384	39,604
Liabilities and Shareholders' Equity		
Current Liabilities:		
Accounts payable	9,126	7,628
Accrued liabilities	3,628	2,413
Accrued income taxes	565	298
Long-term debt due within one year	1,039	523
Obligations under capital leases due within one year	102	95
Total Current Liabilities	14,460	10,957
Long-Term Debt	7,191	7,709
Long-Term Obligations Under Capital Leases	2,483	2,307
Deferred Income Taxes and Other	809	463
Minority Interest	1,938	1,025
Shareholders' Equity		
Common stock at par	224	228
Capital in excess of par value	585	547
Retained earnings	18,167	16,768
Foreign currency translation adjustme	(473)	(400)
Total Shareholders' Equity	18,503	17,143
Total Liabilities and Shareholders' Equity	45,384	39,604

DO NOT COPY

DO NOT COPY

DO NOT COPY

DO NOT COPY