

**1.** Deferred taxes can be found in all of the categories listed. Examples are:

Current liabilities may include deferred tax liabilities arising from an installment sale with cash payments expected within one year.

Deferred income tax credits resulting from the use of accelerated depreciation for tax purposes and straight line for financial reporting are reported in long-term liabilities.

The stockholders' equity account may include the deferred tax offset to the valuation allowance for available-for-sale securities or the cumulative translation adjustment account.

The deferred tax asset (debit) due to accrued compensation with cash payment expected within one year is a component of current assets.

Long-term assets would include deferred tax assets (debits) recognized, (for example for, postretirement benefits or restructuring charges), but not expected to be funded within one year.

**2.** (i) Correct: Under SFAS 109, changes in tax laws must be reflected in the deferred tax liability in the period of enactment.

(ii) Correct: Answer to (i) also applies to deferred tax assets.

(iii) Correct: The tax consequences of events that have not been reflected in the financial statements (such as future earnings or losses) are not recognized.

(iv) Incorrect: See answers to (i) and (ii) above. This statement is true for the deferral method (see footnote 2 on text page 292).

(v) Incorrect: Changes in deferred tax assets and liabilities are included in income tax expense except for those charged directly to stockholders' equity.

**3. a.** Permanent differences are items of income or expense that affect *either tax return income or financial income, but not both*. Examples include:

Tax-exempt interest income (not reported on the tax return,

Interest expense on amounts borrowed to purchase tax-exempt securities (not deductible on the tax return),

Tax or other nondeductible government penalties (not reported on the tax return),

Statutory mineral depletion in excess of cost basis depletion (not reported in the financial statements),

Premiums on key-person life insurance policies (not deductible on the tax return),

Proceeds from key-person life insurance policies (not reported on the tax return).

b. Permanent differences, depending on their nature, either increase or decrease the firm's effective tax rate relative to the statutory rate. For example, tax-exempt interest income (the first example listed) reduces the effective tax rate as there is no tax expense associated with this income.

**4. a.** (i) If the deferred tax liability is not expected to reverse, there is no expectation of a cash outflow and the liability should be considered as equity.

(ii) If the deferred tax liability is the result of a temporary difference that is expected to reverse, with consequent tax payment, it should be treated as a liability.

b. Because both the amounts and timing of tax payments resulting from the reversals of temporary differences are uncertain, deferred taxes should be excluded from both liabilities and equity.

c. The portion of the deferred tax liability that represents (the present value of) expected payments should be treated as debt. Accounting-based timing differences that are not expected to reverse should be treated as equity.

**5.** We begin by determining the cost of each asset using the information about asset L. Year 2 depreciation under the sum-of-the-years' digits method with a five-year life is 4/15ths. Therefore, the depreciable base (cost – salvage value) must be  $\$12,000/(4/15) = \$45,000$  and the cost must be  $\$48,000$  because salvage value is  $\$3,000$ . We can now prepare a depreciation schedule for each method:

Year	Depreciation Expense		
	Asset K Straight-line	Asset L SYD <sup>2</sup>	Asset M DDB <sup>3</sup>
1	\$ 9,000	\$15,000	\$19,200
2	9,000	12,000	11,520
3	9,000	9,000	6,912
4	9,000	6,000	4,147
5	<u>9,000</u>	<u>3,000</u>	<u>3,221</u>
Total	\$45,000	\$45,000	\$45,000

<sup>1</sup> Base = \$45,000 {cost – salvage value}; expense =  $\$45,000/5 = \$9,000$ .

<sup>2</sup> Base = \$45,000; expense = 5/15ths, 4/15ths, 3/15ths, etc.

<sup>3</sup> Base = \$48,000 (salvage value ignored); rate = 40%

Year 1 expense =  $.40 \times \$48,000 = \$19,200$ , leaving \$28,800

Year 2 expense =  $.40 \times \$28,800 = \$11,520$ , leaving \$17,280

Year 3 expense =  $.40 \times \$17,280 = \$6,912$ , leaving \$ 10,368

Year 4 expense =  $.40 \times \$10,368 = \$4,147$ , leaving \$ 6,221

Year 5 expense = \$ 3,221 leaving \$ 3,000

a. The double declining balance method is used on the tax return for all three assets; year 2 depreciation expense under that method is **\$11,520**.

b. Financial statement depreciation expense in year two (from table on previous page) is:

Asset K (straight line)	\$ 9,000
Asset M (double declining balance)	11,520

c. (i) At the end of year two, accumulated depreciation equals (from table on previous page):

Asset K (straight line)	\$18,000
Asset L (SYD)	27,000
Asset M (DDB)	30,720
Tax return (DDB)	30,720

Therefore, the deferred tax liability is:

Asset K: .34 (\$30,720 - \$18,000) =	\$ 4,324.80
Asset L: .34 (\$30,720 - \$27,000) =	1,264.80

Asset M: No deferred tax as the same method is used for financial and tax reporting.

(ii) At the end of year five, accumulated depreciation is the same under all methods and there is no deferred tax asset or liability.

**6.** a.b. Assuming that Mother Prewitt continues to buy machines in the future, the depreciation timing difference will never reverse and there is no expected cash consequence. In this case, the deferred tax can be treated as equity.

If the installment sale is not expected to recur, the tax on that sale will be paid in 2001 and will require cash. For that reason, the \$27,200 of deferred taxes should be considered a liability when calculating liquidity, solvency, and leverage ratios.

If, on the other hand, installment sales are expected to recur, such sales are no different from the depreciation case. The cash consequences of deferred tax items depend on the probability of their reversal, not on their nature.

c. Under SFAS 109 (liability method), enacted changes in tax rates are recognized, and the deferred tax liabilities must be restated to amounts based on the 40% tax rate. The incremental liability is recorded as a component of income tax expense regardless of when (or if) paid.

d. A valuation allowance would be required if it were deemed "more likely than not" that some or all of the deferred tax asset would not be realized.

7	Years ended June 30			
	1997	1998	1999	2000
Amounts in \$millions				
Deferred tax assets due to depreciation	\$ 57.7	\$ 40.3	\$ 49.2	\$ 37.7
Effect on fixed assets of:				
Impairment of long-lived assets		47.0		
Write-downs of operating assets		47.0	4.2	26.6
Write-downs of capitalized software		-	16.0	-
Total effect on fixed assets		\$ 94.0	\$ 20.2	\$ 26.6
Tax rate		34%	35%	35%
a. Expected effect on deferred tax asset		\$ 32.0	\$ 7.1	\$ 9.3
Reported change in deferred tax asset		(17.3)	8.9	(11.6)
Difference between expected effect and reported change in deferred tax asset		\$ 49.3	\$ (1.8)	\$ 20.9

Write-downs reduce the carrying amount of the assets on the financial statements but have no effect on the tax basis. Even if the company uses the straight-line depreciation method for both tax and financial reporting, tax depreciation would be higher than book depreciation after a write-off, generating deferred tax liabilities (credits) or lowering deferred tax assets (debits). In each year, therefore, write-downs increase the deferred tax asset but depreciation expense tends to reduce it.

In the table above, we compute the effect of the asset changes on the deferred tax asset for each year by multiplying the impairment plus the write-off amount by the tax rate for that year. We then compare that effect with the reported change in the deferred tax asset related to depreciation.

For 1998, the non-cash impairment of long-lived assets and the write-down of operating assets would generate a \$32 million *increase* in deferred tax assets. However, the company reported a *decrease* of \$17.3 million in deferred tax assets due to depreciation. The difference is much too high to result from current year depreciation expense. The most likely explanation is that the company sold fixed assets during the year, eliminating the book-tax difference relating to those assets. If those assets had a higher tax basis than book basis, sale would reduce the deferred tax asset by that difference multiplied by the tax rate.

In 1999, the difference is smaller and in the right direction, since we have an expected \$7.1 million increase due to write-downs and a reported increase of \$8.9 million. Regardless of whether internal-use software was capitalized on the tax return, its write-off should generate a deferred tax debit. This difference is probably due to a combination of current year depreciation (reducing the deferred tax asset) and asset sales (increasing the deferred tax asset).

In 2000, instead of an increase of \$9.3 million, the company reports a decrease of \$11.6 million in deferred tax assets. As for 1998, asset sales provide the most likely explanation.

**8.** a.(i) Income tax expense is lower than it would be if SGI provided taxes on the undistributed earnings of its foreign subsidiaries.

Income tax paid was not affected because those earnings are undistributed, that is, SGI did not pay U.S. income tax on them.

(iii) The effective tax rate is lower than it would have been because income tax expense is lower (see answer a(i)).

(iv) Earnings per share are higher because income tax expense is lower.

(v) Book value per share is higher because retained earnings (and therefore, equity) are higher.

b. In the year that the foreign subsidiaries remitted previously undistributed earnings:

Pretax income would not change because SGI had previously recognized those earnings.

Income tax expense would increase by the amount of the income tax payable on the remitted earnings.

Income tax paid would increase by the U.S. tax paid on the remitted earnings.

The effective tax rate would increase to reflect higher income tax expense and no change in pretax income.

Earnings per share would decline due to higher income tax expense, resulting in lower net income.

(vi) Book value per share would be reduced; because income tax expense would increase, net income and retained earnings would decline.

c. Reported financial data should not be adjusted if the undistributed earnings are not expected to be remitted. However, if repatriation is likely, (the company needs funds for debt repayment, an acquisition, or operations), the reported data should be adjusted to establish a deferred tax liability, reducing equity.

d. It is likely that SGI recognized tax expense for deferred taxes on previously undistributed earnings because it changed its policy and now expected to repatriate earnings of foreign subsidiaries, perhaps to meet the liquidity needs of its operations.[As shown in the data provided for problem 9, the company reported large operating losses in fiscal 1998 - 2000.]

**9.** a. As of June 30, 1999 Silicon Graphics [SGI] needed to generate nearly \$900 million in taxable income to realize reported net deferred tax assets of \$489 million. However, for fiscal 1998 and 1999 combined, the company reported net losses of \$406 million. It is, therefore, difficult to support the company's assertion that because of forecasted income from operations it "*is more likely than not*" that the deferred tax asset will be realized.

The company's sale of a 35% interest in MIPS generated a \$272 million gain; if not for that gain, SGI would have reported a significant pretax loss for 1999, casting further doubt on its assumption of future taxable income. SGI's plan to divest its remaining 65% interest in MIPS technologies may enable it to generate a portion of the required income, but that is unlikely to be sufficient. (Profit on 35% was \$272 million; at that rate profit on the remaining 65% would be (\$272 x 65%/35%) \$505 million, far below the required \$900 million ) Thus, the valuation allowance at June 30, 1999 was unlikely to be adequate.

b. (Amounts in \$thousands)

Years ended June 30	1998	1999	2000
Reported:			
Gross deferred tax assets	\$ 643,307	\$ 593,965	\$ 743,916
Valuation allowance	(90,705)	(105,364)	(632,324)
Net deferred tax assets	\$ 552,602	\$ 488,601	\$ 111,592
Adjusted:			
Gross deferred tax assets	\$ 643,307	\$ 593,965	\$ 743,916
Reported valuation allowance	(90,705)	(105,364)	(632,324)
Adjustment to valuation allowance	\$ 552,602	\$ 488,601	\$ 111,592
(i) Adjusted income tax expense	\$ (415,310)	\$(560,493)	\$(559,252)
(ii) Adjustment to income tax paid	none	none	none
Reported pretax income	\$ (596,919)	\$ 125,721	\$(381,884)
Adjusted income tax expense	(415,310)	(560,493)	(559,252)
(iv) Adjusted net income	\$(1,012,229)	\$(434,772)	\$(941,136)
(iii) Effective tax rate	(70)%	446%	(146)%

The increase in valuation allowance required to offset all of its deferred tax assets is added (the increase is a negative adjustment) to the reported tax expense to compute the adjusted income tax expense.

Because it is only a financial reporting effect and does not affect taxable income, the change in the valuation allowance has no impact on tax paid.

The effective tax rate is calculated as income tax expense/pretax income.

Net income is calculated by deducting adjusted income tax expense from pretax income.

c. The tax-free distribution of the remaining shares of MIPS to shareholders no longer allows Silicon Graphics to include a gain from that sale in evaluating the sufficiency of the valuation allowance. Therefore, a significant portion of the increase in the valuation allowance (\$527 million) must be due to the tax-free distribution. [The company disclosed that it added \$369 million to the valuation allowance as a result of the MIPS transaction. The remaining increase in the valuation allowance probably reflects the 2000 operating loss, which increased operating loss carryforwards and makes it more difficult to justify an assumption of future profitability.]

**10.** a. (i) Using the format of Exhibit 9-3 on text page 311, we convert the tax rate effect of lower foreign tax rates to the dollar effect. For example, the 1998 dollar effect equals the rate effect times total pretax income =  $-3.0\% \times \$2,263 = \$(-68)$  million.

Amounts in \$millions	1998	1999	2000
Statutory rate	35.0 %	35.0 %	35.0 %
Effect of lower foreign tax rate	(3.0)%	(2.7)%	(3.0)%
Pretax income			
United States	\$1,629	\$2,771	\$2,126
Foreign	634	885	1,084
Total	\$2,263	\$3,656	\$3,210
Tax @ statutory rate	\$ 792	\$1,280	\$1,124
(i) Effect of lower foreign tax rate	(68)	(99)	(96)

(ii) – (v): Exhibit 9S-1 (next page) is based on the following computations:  
To compute foreign income tax expense, we multiply foreign pretax income by the

statutory rate and subtract the answer to (i). We assume that all other effects apply to U.S. income. For example, the 1998 calculation is  $[(.35 \times \$634) - \$68] = \$154$  million. The effective rate on foreign income is calculated as foreign tax expense divided by foreign pretax income (1998:  $\$154/\$634 = 24.3\%$ ).

Foreign net income is obtained by subtracting foreign tax expense from foreign pretax income.

U.S. tax expense and U.S. effective rate are calculated by subtracting foreign tax expense from the total tax expense.

U.S. net income is obtained by subtracting U.S. tax expense from U.S. pretax income.

Exhibit 9S-1

	Amounts in \$millions	1998	1999	2000
	Foreign income - pretax	\$ 634	\$ 885	\$1,084
	Foreign tax expense	<u>(154)</u>	<u>(211)</u>	<u>(283)</u>
(iii)	Foreign net income	\$ 480	\$ 674	\$ 801
(ii)	Foreign tax rate	24.3%	23.8%	26.1%
	U.S. income - pretax	\$1,629	\$2,771	\$2,126
	U.S. tax expense	<u>(115)</u>	<u>(1,394)</u>	<u>(744)</u>
(iv)	U.S. net income	\$1,514	\$1,377	\$1,382
(v)	U.S. tax rate	7.1%	50.3%	35.0%

**b. Percent change from prior year**

	% Change	
	1999	2000
(i) Foreign income - pretax	39.6%	22.5%
Foreign tax expense	37.0%	34.1%
(ii) Foreign net income	40.4%	18.8%
(i) U.S. income - pretax	70.1%	-23.3%
U.S. tax expense	1109.1%	-46.6%
(ii) U.S. net income	-9.0%	0.3%

c. Percent changes in foreign net income are only slightly different from the

pretax percent changes. The effect is greater for 2000 due to the increased tax rate, which reduced the growth rate of net income relative to pretax income.

The differences are far greater for U.S. income due to more significant tax rate changes. The increased (versus 1998) 1999 tax rate (due to the absence of the two settlements and a higher rate on bottling transactions) in tax rates converted pretax income growth of 70% to a 9% decline in net income. As the tax rate fell in 2000 (no bottling transactions), the decline in pretax U.S. income was converted to a minor increase in net income.

d. The “other effects” increased the effective tax rate in both 1998 and (to a lesser extent in) 1999. The analyst should ask management about the nature of these effects, their sources, and the likelihood of future impacts.

An analyst should ask about the effect of the bottling transactions. The high effective tax rate suggests that PepsiCo was assuming that reinvested income would be received as dividends (see Box 13-2 on text page 471) but realized them via sale instead. The analyst should evaluate the possibility that there will be other such transactions in the future.

Foreign effective tax rates depend on the “mix” of earnings from various jurisdictions with different tax rates. The analyst should ask which foreign jurisdictions apply tax rates that are higher (lower) than the average, whether any tax “holidays” are due to expire (or may be extended), and how mix changes have affected the effective foreign tax rate over the 1998 to 2000 period. The answers to these questions also help earnings forecasts. Specifically, they enable the analyst to forecast the aftertax impact of assumed changes in pretax income from major foreign subsidiaries.

e. The most likely explanation is that a portion of these charges had no tax effect, thus reducing pretax income but not taxable income. One example would be the writedown of nondeductible acquisition goodwill. Another example would be an asset writedown in a tax jurisdiction where the loss must be carried forward, and a valuation allowance offsets the resulting deferred tax asset.

f. In the absence of any nonrecurring transactions (for example, settlements, bottling transactions, and asset impairments), PepsiCo should face an effective tax rate of the statutory rate of 35%, less the average effect of lower foreign tax rate of 2.9%, or 32.1%. This is nearly identical to its 2000 effective tax rate.

g. In 1998, management must have considered the effects of the two settlements, the asset impairment and restructuring charge, and the “other effects” as nonrecurring. These adjustments result in an effective tax rate of 32% ( $11.9 + 5.7 + 21.8 - 3.4 - 4.0$ ); it is likely that management used one or more components of the “other effects – net” to estimate a 31% effective rate on

comparable operations.

For 1999, we need only to eliminate the effect of bottling transactions and “other – net” to arrive at management’s 32.2% rate. Finally, the actual and assumed comparable 2000 rates are identical; they both adjust the statutory rate only for the effect of lower foreign tax rates.

h. The tax effects of the Puerto Rico settlement (tax case) and the bottling transactions should be excluded in earnings used to value PepsiCo because neither effect can be expected to recur.

**11. a.** In the U.S., zero-coupon debt should not result in deferred tax effects because there is no difference between tax and financial statement computation and reporting of interest expense. Internal Revenue Service rules require the use of the effective tax rate for the tax return and GAAP mandates the use of the effective tax rate for financial statements.

A deferred tax credit (liability) implies that financial reporting deductions are lower than the amounts reported on the tax return. The zero coupon debt must have been issued in a (foreign) tax jurisdiction that permits the use of straight-line amortization of the difference between the face amount of the debt and its issue price. Straight-line amortization results in higher expense in the early years (see text pages 329 – 332 for discussion of zero-coupon debt).

Another reason may be the differential treatment of issuance costs. If issuance costs are immediately expensed for taxes but amortized (using the interest method) for financial reporting, a deferred tax liability would be created. However, we do not expect this tax-book difference to generate deferred tax credits of the magnitude reported by PepsiCo because issuance costs rarely exceed 3 to 5% of the proceeds.

b. The deferred tax credit (liability) can be expected to decrease each year by the amount of imputed interest expense difference (between book and tax amounts) multiplied by the marginal tax rate for that tax jurisdiction. The amounts reported by PepsiCo for 1998 to 2000 reflect that trend. When the debt matures and the full amount of the accrued interest is paid (and deducted on the tax return), the deferred tax credit (liability) attributed to that debt issue will decline to zero.

c. The primary reason for the decline is most likely the increasing interest expense reported on the financial statements (due to the application of the effective interest rate to an increasing carrying amount of debt) whereas the straight-line method interest expense on the tax return remains constant.

A second reason for the decline may be repurchase of a portion of the zero coupon debt in some years, eliminating a corresponding amount of the accumulated

interest differential and therefore the deferred tax credit.

**12.** a. The first step converts the effective tax rate analysis from Exhibit 9P-1 into a pretax income-based reconciliation, following the format of Exhibit 9-3 on text page 311. Exhibit 9S-2 shows the results for each year and three-year totals.

**Exhibit 9S-2. Honda Motor**

**Reconciliation of Effective and Statutory Rates**

In ¥ millions except percentages	Years ended March 31			3 Year
	1999	2000	2001	Total
Pretax income - Japanese	199,848	127,562	133,166	460,576
Pretax income - Foreign	320,663	288,501	251,810	860,974
Pretax income – Total	520,511	416,063	384,976	1,321,550
Statutory tax rate	48.0%	41.0%	41.0%	43.3%
Valuation allowance	1.2	2.8	5.2	
Difference in normal foreign tax rates	(3.0)	(1.3)	(1.0)	
Changes in tax laws and rates	(4.2)	0.0	0.0	
Reversal of valuation allowance	(0.1)	(0.1)	(0.1)	
Other	2.2	(1.4)	1.3	
Effective tax rate	44.1%	41.0%	46.4%	43.8%
Income tax expense at statutory rate	249,845	170,586	157,840	578,271
Effects of:				
Valuation allowance	6,246	11,650	20,019	37,915
Difference in tax rates of foreign subsidiaries	(15,615)	(5,409)	(3,850)	(24,874)
Changes in tax laws and rates	(21,861)	0	0	(21,861)
Reversal of valuation allowance due to operating loss carryforwards	(521)	(416)	(385)	(1,322)
Other	11,451	(5,825)	5,005	10,631
Income tax expense*	229,545	170,586	178,629	578,760

Calculation below required for part c.

Pretax income - Foreign	320,663	288,501	251,810	860,974
Foreign tax expense**	(138,303)	(112,877)	(99,392)	(348,215)
Foreign net income	182,360	175,624	152,418	512,759
Foreign tax rate	43.1%	39.1%	39.5%	40.4%

\* Numbers differ from Exhibit 9P-1 due to rounding

\*\* Calculated as (statutory rate x foreign pretax income) – differences in tax rates of foreign subsidiaries. Using 1999 as an example: (48% x \$320,663) – \$15,615 = \$138,303

b. The reconciliation in Exhibit 9S-2 shows the following:

Net changes in the valuation allowance increased tax expense by ¥36,593 (37,915 – 1,322) million over the three year period increasing from ¥5,725 (¥6,246 – ¥521) million in 1999 to ¥19,634 (¥20,019 – ¥385) in 2001.

Changes in tax law decreased 1999 income tax expense by ¥21,861 million. There were no changes in tax laws and rates for other years.

Honda's disclosures are unclear. It appears that the decision not to recognize deferred taxes on reinvested subsidiary earnings decreased 2001 tax expense by ¥856 million [5,987 – 5,131] or 0.2% of pretax income. However the reported amounts are extremely low relative to the reported reinvested earnings (¥663,540 million at 3/31/01). A better understanding of this issue is required before meaningful adjustments can be made.

c. (i) Although lower non-Japanese tax rates reduced Honda's tax expense in each year, 1999-2001, that reduction declined from 1999 to 2001.

As Japanese tax rates declined from 48% in 1999 to 41% in 2000 and 2001, they are now closer to non-Japanese rates reducing the difference.

d. Factors an analyst must consider when forecasting Honda's effective tax rate for 2002 include the following:

The mix of Japanese and foreign pretax income,  
Any possible changes in Japanese and foreign tax rates,  
The impact of the valuation allowance, and  
The composition of and trends in "other" tax differences.

**13.** a.

1991 tax rate

1992 tax rate

Q1	\$1,224/\$4,797 = 25.5%	\$232/\$1,123 = 20.7%
Q2	\$ 624 /\$2,600 = 24.0	\$934/\$3,723 = 25.1
Q3	\$ 848 /\$3,244 = 26.1	\$583/\$98 = (594.9)

b. Using a tax rate of 17% for 1992 Q3 alone, tax expense would have been \$16,660. The actual tax credit for Q3 was \$ 583,000, for a difference of \$600,000.

On a pretax basis, 1992 Q3 declined by 97% from 1991 Q3 (\$98 versus \$3,224). Net income, however, declined by only 72% (\$681 versus \$2,396) because 1992 Q3 included the tax benefit of revising the tax rate on earnings already reported for the first two quarters of 1992.

One possibility is to make comparisons only on a pretax basis to avoid distortions due to changes in the estimated tax rates. Another approach would use post-tax data to analyze the trends by applying the change to each quarter of 1992.

e. (i)	1992		
	Q1	Q2	Q3
Pretax income	\$1,123	\$3,723	\$ 98
Income tax expense @17t%	<u>(191)</u>	<u>(633)</u>	<u>(17)</u>
Net income	\$ 932	\$3,090	\$ 81

(ii) The assumption has a marginal effect on Q1; it continues to reflect a significant decline relative to 1991 Q1. For Q2, we see the improvement in performance augmented by a lower tax rate (17% compared to 25%, but presumably a better indicator of future tax rates). The analyst should attempt to determine the causes of the decline in income in Q1 and Q3, the recovery in Q2 and better understand the implications for future performance.

**14. a.** The following questions should enable the analyst to better understand trends in earnings and permit a more informed forecast of earnings and firm value. Lower foreign rates were not as beneficial in 2000 as they have been in the three previous years (7% compared to an average of more than 14% (see Exhibit 9S-3 below). To what extent does this change reflect the 1999 expiration of the tax holiday? What tax rate on foreign income does management expect in 2001 and future years.

Explain why state tax expense has been so variable, and seems to be unrelated to US pretax earnings. Although US pretax income rose significantly in 2000, state tax expense declined by 50%.

What is the reason for the substantial decline in the effects of the valuation allowance from 1997 to 2000? For which tax jurisdictions is the valuation

allowance provided? Under what conditions would the deferred tax assets for which the valuation allowance has been provided be realized?

Which tax jurisdictions have deferred tax assets for which a valuation has not been provided? What are the amounts, is there a deadline for realization, and what management assumptions result in the decision not to provide a valuation allowance?

What are the components of nondeductible and "other" items?

Are changes in tax rates under consideration in any jurisdiction in which the company operates?

#### b. Exhibit 9S-3. Coca Cola Enterprises

in \$millions	1997	1998	1999	2000
Income tax expense reconciliation				
U.S. federal statutory expense	\$ 62	\$ 59	\$ 31	\$ 117
State expense, net of federal benefit	2	0	4	2
European and Canadian operations, net	(21)	(21)	(17)	(22)
Rate change benefit	(58)	(29)	0	(8)
Valuation allowance provisions	15	8	3	7
Nondeductible items	5	6	7	7
Other (net)	2	4	1	(6)
Total provision for income taxes	\$ 7	\$ 27	\$ 29	\$ 97
Pretax earnings				
Total	\$ 178	\$ 169	\$ 88	\$ 333
Foreign	(162)	(151)	(49)	(141)
U.S.	\$ 16	\$ 18	\$ 39	\$ 192
Statutory rate	35%	35%	35%	35%
State expense, net of federal benefit	1	0	5	1
European and Canadian operations, net	(12)	(12)	(19)	(7)
Rate change benefit	(33)	(17)	0	(2)
Valuation allowance provisions	8	5	3	2
Nondeductible items	3	4	8	2

Other (net)	1	2	1	(2)
Total provision for income taxes	4%	16%	33%	29%
Foreign operations: pretax income	\$ 162	\$ 151	\$ 49	\$ 141
Income tax expense*	(35)	(32)	(0)	(28)
Net income	\$ 127	\$ 119	\$ 49	\$ 113
Effective foreign tax rate	21.9%	21.0%	0.5%	19.5%

U.S. Operations: pretax income	\$ 16	\$ 18	\$ 39	\$ 192
Income tax expense**	28	5	(29)	(69)
Net income	\$ 44	\$ 23	\$ 10	\$ 123
Effective U.S. tax rate	-177.7%	-26.2%	73.7%	36.2%

\* Calculated as (Statutory rate x Foreign pretax income) – European and Canadian operations, net. Using 1997 as an example: (35% x 162) - 21 = 35

\*\* Calculated as Total provision less foreign income tax expense. Using 1997 as an example: \$7 – \$35 = \$(28)

c. The tax effect of rate changes is clearly nonrecurring (certainly nonoperating) even though there have been such effects in three of the four years presented. This effect appears to apply only to foreign income so that the U.S. tax rate is unaffected.

If we remove this effect from the foreign income tax expense computed in part b, we obtain the following:

<i>in \$millions</i>	1997	1998	1999	2000
Adjusted foreign tax expense	\$(93)	\$(61)	\$(0)	\$(36)
Adjusted foreign tax rate	57.7%	40.2%	0.5%	25.2%

The adjusted tax rate is much closer to CCE's statutory rate, especially in 1997 and 1998.

	1997	1998	1999	2000
<b>d.</b>				
(i) Total pretax income	\$ 178	\$ 169	\$ 88	\$ 333
Actual tax expense	(7)	(27)	(29)	(97)
Net income	\$ 171	\$ 142	\$ 59	\$ 236

(ii) Total pretax income	\$ 178	\$ 169	\$ 88	\$ 333
Adjusted tax expense (part c)	(65)	(56)	(29)	(105)
Adjusted net income	\$ 113	\$ 113	\$ 59	\$ 228

Adjusted net income is significantly lower for 1997 and 1998, reflecting the exclusion of the rate change benefits. There is no effect for 1999 and a small one for 2000.

e. The 2001 effective tax rate for CCE should contain the following components:

Statutory rate	= 35%
State rate effect	2
Lower foreign operations rate	(7)
Valuation allowance	5
Nondeductible items	4
Effective rate	= 39%

This calculation has the following components:

Statutory rate assumed unchanged

State rate: average four year rate: Average rate calculations are:

	1997	1998	1999	2000	Average
Statutory rate	35%	35%	35%	35%	35%
State expense, net	1%	0%	5%	1%	2%
Foreign operations, net	-12%	-12%	-19%	-7%	-13%
Valuation allowance provisions	8%	5%	3%	2%	5%
Nondeductible items	3%	4%	8%	2%	4%

Foreign effect: use 2000 rate as end of tax holiday makes prior year effect less relevant

Valuation allowance: average four year rate

Nondeductible items: average four year rate

Assuming that the federal statutory rate and the state rates remain constant, the foreign rate is 7% (consider the 1999 expiration of the tax holiday), the continued impact of the valuation allowance (assumed to continue until unless we get information that suggests an improvement in the ability to generate taxable income) and nondeductible items (assumed to relate to franchise rights that the company considers indefinitely long-lived) gives us a 39% effective rate.

f. The effective tax rates developed in (e) is six percentage points higher

than that stated in the Management Review. The most likely reason for that difference is that management may assume no further increases in the valuation allowance; omitting the valuation allowance would reduce our estimated rate to 34%. However, the actual long-run effective rate will depend on the earning mix (U.S. versus foreign, see part g.), the trend of the valuation allowance, and the long-run effect of nondeductible items. Although impossible to estimate, the contribution of "other – net" is another variable.

g. In 1997 and 1998, foreign operations contributed most of the pretax income reported by CCE (approximately 90% in both years). In those years, tax law and rate changes in foreign jurisdictions also helped lower the effective tax rates. In 1999, foreign income fell significantly while domestic income rose relative to the prior years. However, an absence of rate changes resulted in a substantial increase in the effective tax rate. In 2000, U.S. pretax rose sharply, reducing foreign pretax income to 42% of the total. Because of this decline, another beneficial foreign rate change did not provide a benefit similar to that of previous years.

Thus, both the proportion of foreign income to domestic income and foreign rate changes have been the principal factors in the changing effective rates faced by the firm.

**15.** The benefit of a tax deduction for the 1997 loss is a one-time occurrence and as such, would increase the value of the firm and its common shares by the amount of the benefit. However, the post-announcement impact on the value of the firm and its common shares will depend on whether (and the extent to which) the market had assumed a successful resolution of the case.

**16.** The answers to parts a and b are shown in the following table:

Repsol			
a. Effective tax rates, profit margin, and ROE under Spanish GAAP			
(in €millions)	1998	1999	
Stockholders' equity	€ 6,043	€12,526	
Net sales	18,573	25,633	
Pretax income	1,411	1,743	
Income tax expense	(397)	(557)	
Net income	€ 1,014	€ 1,186	

(i)	Effective tax rate	28.1%	32.0%
(ii)	Net profit margin	5.5%	4.6%
(iii)	Return on ending equity	16.8%	9.5%

b. Effective tax rates, profit margin, and ROE under U.S. GAAP

(in €millions)			
	1998	1999	
Stockholders' equity	€ 5,653	€12,140	
Net sales	18,573	25,633	
Pretax income	1,277	1,622	
Income tax expense	(402)	(488)	
Net income	€ 875	€ 1,134	
(i)	Effective tax rate	31.5%	30.1%
(ii)	Net profit margin	4.7%	4.4%
(iii)	Return on ending equity	15.5%	9.3%

The effective tax rate was calculated as income tax expense/pretax income.

Return on ending equity is derived as follows: net income/ending equity.

c. The effective tax rate under US GAAP is significantly higher in 1998 but lower in 1999. The tax rate also appears to be more variable under Spanish GAAP. The net profit margin is lower under US GAAP for both years, as is the return on equity. These differences would tend to reduce valuation of Repsol shares as net profit is lower as is estimated growth. (Growth rate estimates are usually based on sustainable growth rates derived from return on equity.)

d. The calculations are:

(in millions)			
	1998	1999	% change
Spanish GAAP			
Pretax income	€ 1,411	€ 1,743	23.5%
Net income	1,014	1,186	17.0%
US GAAP			
Pretax income	\$ 1,277	\$ 1,622	27.0%
Net income	875	1,134	29.6%

The growth rate is higher for both pretax and after-tax income. A major factor in the higher growth rate for net income is that the effective tax rate rose under Spanish GAAP but was relatively unchanged under US GAAP.