

1		1996	Increase	1995	110712
	Replacement cost of inventories	644.5		549.7	
	Inventories as reported	594.1		502.0	
	LIFO reserve	50.4	2.7	47.7	

$$\begin{aligned} \text{Cost of Goods Sold (FIFO)} &= \text{Cost of Goods (as is)} - \text{Increase in LIFO reserve} \\ &= 1,077.8 - 2.7 = 1,075.1 \end{aligned}$$

$$\begin{aligned} \text{Net Income (FIFO)} &= \text{Net Income (as is)} - \text{Change in COGS} \cdot [1 - \text{tax rate}] \\ &= 1,212.8 + (2.7) \cdot 65.00\% = 1,214.6 \end{aligned}$$

Assume that LIFO is allowed only in the US; hence the marginal tax rate of 35%.

All Beginning inventory Carried as FIFO value				549.7
LIFO Beginning inventory Carried as FIFO value	39.00%	•	549.7	= 214.4
This LIFO layer increased in value by =	50.4	-	47.7	= 2.7
So cost increase rate (inflation rate)	2.7	÷	214.4	= 1.26%

$$\begin{aligned} \text{Cost of Goods (LIFO)} &= \text{COGS (FIFO)} + \text{Beg. Inventory (FIFO)} \cdot \text{Inflation Rate} \\ &= 1,075.1 + 549.7 \cdot 1.26\% \\ &= 1,075.1 + 6.9 = 1,082.0 \end{aligned}$$

$$\begin{aligned} \text{2 Net Income (LIFO)} &= \text{Net Income (FIFO)} - \text{Change in COGS} \cdot [1 - \text{tax rate}] \\ &= 1,214.6 - 6.9 \cdot 65.00\% = 1,210.1 \end{aligned}$$

3	As Is		FIFO
Ending Current assets	2,364.6	+ 50.4	= 2,415.0
Ending Current Liabilities	2,599.1	+ LIFO Reserve x tax rate 50.4 • 35.00%	= 2,649.5
Current ratio	0.910		0.911

4				Current Cost
Beginning Inventory	502.0		549.7	
Ending inventory	594.1		644.5	
Average	<u>548.1</u>		<u>597.1</u>	
Cost of Goods Sold	1,077.8		1,075.1	1,082.0
Average Inventory	÷ 548.1		÷ 597.1	÷ 597.1
Inventory turnover	<u>1.97</u>		<u>1.80</u>	<u>1.81</u>

5 ROE	1996	1995	1994	1993	1992	1991
Net income	1,212.8	886.6	922.0	730.8	720.4	645.6
Average equity	1,841.4	1,598.7	1,578.2 #	1,589.4 #	1,471.5	673.1
ROE	65.86%	55.46%	58.42%	45.98%	48.96%	95.92%
R & D Expenditure	722.8	656.9	610.1	567.3	510.5	416.5

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U.S. statutory tax rate.	35.00%	
Increase (decrease) in taxes resulting from:		
Lower rates in other jurisdictions, net	(10.30)%	After Tax rate
<u>Marginal Tax Rate</u>	24.70%	75.30%

R & D Expense from expenditure		1996	1995	1994
This year	0.167	120.5	109.5	101.7
Last year	0.333	219.0	203.4	189.1
Two years back	0.333	203.4	189.1	170.2
Three years back	0.167	94.6	85.1	69.4
R & D Expense		637.4	587.0	530.4
R& D Expenditure - Expense		85.4	69.9	79.7
After tax effect 75.30%		64.3	52.6	60.0
Net income as reported		1,212.8	886.6	922.0
Net income with R & D capitalized		1,277.1	939.2	982.0

7 Research and development asset

		1996	1995	1994	1993
From asset					
This year	0.833	602.3	547.4	508.4	472.8
Last year	0.500	328.5	305.1	283.7	255.3
Two years back	0.167	101.7	94.6	85.1	69.4
Total		1,032.5	947.0	877.2	797.4
After tax effect 75.30%		777.4	713.1	660.5	600.5
= Equity increase					
Average Equity increase		745.3	686.8	630.5	
Shareholders' equity as reported		1,841.4	1,598.7	1,578.2	
Adjusted Equity		2,586.7	2,285.4	2,208.6	

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Net income with R & D capitalized		1,277.1	939.2
Average Adjusted Equity	/	2,436.1	2,247.0
Return on Equity	=	52.43%	41.80%