The Economic Effects of Corporate Rate Reductions: Financial Reporting

Douglas Shackelford University of North Carolina

March 29, 2013

	Book-tax Conformity	Permanent <u>Difference</u>	Temporary Difference <u>Deferred Tax Liabili</u>	ty Deferred Tax Asset
Sales Revenue	\$500	\$500	\$500	\$500
Municipal Interest		\$40		
Installment Sales Revenue			\$60	
Warranty Expense				(\$110)
Income before income taxes				
(NIBT)	\$500	\$540	\$560	\$390
Income Tax Expense	(\$175)	(\$175)	(\$196)	(\$136.5)
Net Income	\$325	\$365	\$364	\$253.5
ETR	35%	32.4%	35%	35%
Balance Sheet				
Assets:				
Cash		\$40		
Accounts Receivable	\$500	\$500	\$500	\$500
Accounts Receivable -				
Installments			\$60	
Deferred Tax Asset				\$38.5
TOTAL	\$500	\$540	\$560	\$538.5
Liabilities and Owner's				
Equity:				
Warranty Liability				\$110
Income Taxes Payable	\$175	\$175	\$175	\$175
Deferred Tax Liability			\$21	
Owners' Equity	\$325	\$365	\$364	\$253.5
TOTAL	\$500	\$540	\$560	\$538.5
			35% of \$60 asset—	35% of \$110 liability,
			yet to be taxed	yet to be deducted

Suppose the tax rate falls from 35% to 25%

DTL of \$21 has to be readjusted to \$15 (instead of \$60*35%, we need \$60*25%)

- Dr. DTL \$6
 - Cr. Tax Expense \$6 → immediate boost to earnings

DTA of \$38.5 has to be readjusted to \$27.5 (instead of \$110*35%, we need \$110*25%)

- Dr. Tax Expense \$11
 - Cr. DTA
- \$11
- → immediate drop in earnings

Major sources of DTLs in 2007

(Raedy et al., *Tax Notes*, 11/26/12)

1. Property, plant and equipment

2. Intangibles

3. Leases

Major sources of DTAs in 2007

(Raedy et al., *Tax Notes*, 11/26/12)

1. Employee benefits

2. Net operating losses

3. Other post-employment benefits

4. Allowance for doubtful accounts

5. Warranty expenses

Are the deferreds big enough to matter? (Raedy et al., *Tax Notes*, 12/19/11)

- Estimated the effect of a 5% drop in the corporate tax rate for Fortune 50
- Hand-collected information from tax footnotes in 2010 financials
- Adjusted for foreign, state and other unaffected items
- Contacted each company twice to confirm estimates

Summary Stats for 31 Companies with Net DTLs (i.e., net of DTAs)

	<u>(1)</u> Net Adj DTL (billions of \$)	(2) Net Adj DTL / Total Assets (%)	(3) Change in Book Income if corporate tax rate is reduced 10 percentage points (billions of \$)	(4) (3) as percentage of Book Income (%)
Mean	6.50	4.77	1.82	52
Median	2.38	4.26	0.68	20
Standard Deviation	9.27	3.82	2.60	98
75 th Percentile	7.44	7.93	2.12	40
25 th Percentile	0.68	1.14	0.20	8
Maximum	35.56	12.50	10.16	414
Minimum	0.01	0.05	0.00	0

Largest immediate increases in book income

Berkshire Hathaway	\$ 10.2 billion
Exxon Mobil	8.2
AT&T	6.0
Verizon	4.9
Pfizer	4.8
ConocoPhillips	4.8
Chevron	3.1
Procter & Gamble	2.5

Largest percentage increases in book income

Valero Energy	414 %	
Kroger	380	
Verizon	194	
Berkshire Hathaway	78	
Marathon Oil	62	
Pfizer	58	
Supervalu	48	
ConocoPhillips	42	

Summary Stats for 18 Companies with Net DTAs (i.e., net of DTLs)

	<u>(1)</u> Net Adj DTA (billions of \$)	(2) Net Adj DTA / Total Assets (%)	(3) Change in Book Income if corporate tax rate is reduced 10 percentage points (billions of \$)	(4) (3) as percentage of Book Income (%)
Mean	4.54	2.18	(1.30)	(20)
Median	2.02	1.15	(0.58)	(8)
Standard Deviation	6.93	2.92	1.98	26
75 th Percentile	4.01	2.20	(0.18)	(4)
25 th Percentile	0.65	0.70	(1.14)	(28)
Maximum	26.00	12.79	(0.00)	(2)
Minimum	0.02	0.31	(7.42)	(90)

Largest immediate reductions in book income

Citigroup	\$ 7.4 billion	
JP Morgan Chase	4.7	
Bank of America	3.6	
Lockheed Martin	1.3	
Goldman Sachs	1.2	
Boeing	1.0	

Biggest percentage reduction in book income

International Asset Holding	45%
Citigroup	35
Lockheed Martin	22
Boeing	15
JP Morgan Chase	14
Goldman Sachs	7

(Bank of America had a loss.)

Should anyone care?

- No, however...
- Accounting information is used internally and externally to evaluate performance.
- Contracts are sticky.
- Chen and Schoderbek (*Journal of Accounting Research*, 2000) found that investors and analysts seemed surprised by the 1993 increase in the corporate rate from 34% to 35%.

Conclusion

- Deferred tax accounts are large.
- A change in the corporate tax rate will require immediate revaluation of all DTLs and DTAs.
- The net effect will immediately increase or decrease a company's book profits.
- On the surface, this revaluation shouldn't matter.
- However, accounting matters and one study from 1993 suggests that investors may find the revaluation surprising.