



The “Tax Cuts and Jobs Act” Impact On Deferred Taxes and the Valuation of an Entity

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Abstract

Financial analysts generally view deferred taxes as an accounting aberration that has little impact on the valuation of an entity. The headlines in financial publications that focus on the recent decrease in federal corporate income tax rates impact on deferred tax assets and liabilities and the resulting effect on net income changed that. This article provides an explanation of the origination of deferred taxes and their impact on the valuation of an entity.

Keywords: Deferred tax asset, deferred tax liability, valuation

1. Introduction

In December of 2017, Congress passed and the President signed the “Tax Cuts and Jobs Act,” the most significant tax legislation in more than thirty years. The decrease in the corporate tax rate from thirty-five percent to twenty-one percent causes a significant increase in the future net income of many companies. The tax reform also results in a significant decrease in the valuation of the deferred tax assets and deferred tax liabilities. So how does the tax act affect future earnings? In simple terms, for any income taxable under federal law, the company now keeps fourteen more cents of it. The complexities of the Internal Revenue Code (IRC) complicate this simple explanation; however, corporations that pay federal income tax will now pay significantly less thus increasing their net income and cash flows. The earnings impact of the change in the value of deferred tax assets and deferred tax liabilities is very different. The decrease in federal income tax rates on the valuation of the deferred tax assets and deferred tax liabilities only effects income in one year and may have little or no effect on the valuation of the company.

2. The Establishment of Deferred Tax Assets and Liabilities

To understand the impact of deferred tax assets and liabilities on the valuation of an entity, it is necessary to have an understanding of how they came into existence. Deferred tax assets and liabilities exist when the timing of the recognition of revenue or expenses for

book income and taxable income is different. Generally Accepted Accounting Principles (GAAP) determines how revenues and expenses comprise book income. The recognition of revenues and expenses to determine taxable income comply with the IRC. In many cases, they are different. However, in order for these differences to result in deferred tax assets or liabilities, the total revenue or expense recognized over time for book and tax purposes for a given transaction must be equal. Revenue included in taxable income before it is recognized for book income or an expense recognized for book income before it is recognized for tax income results in a deferred tax asset. A deferred tax liability is just the opposite. The inclusion of revenue in book income prior to its addition to taxable income or the recognition of an expense for tax income before its identification for book income results in a deferred tax liability. The deferred tax asset or liability will no longer exist when the revenue or expense recognized for both book and tax are equal,

A common transaction resulting in the establishment of a deferred tax asset is the recognition of bad debts for book and tax. GAAP recognizes the expense for bad debts in the same period in which the revenue is earned. To comply requires the recognition of bad debt expense and the establishment of an allowance for doubtful accounts. The write-off of a customer’s account occurs when payment for the customer’s balance becomes unlikely. The offset to the write-off is not expense but rather decreases the allowance for doubtful



accounts. The IRC does not allow accruals for bad debts. The recognition of bad debt expense occurs when the payment of the customer's balance is unlikely resulting in the write-off of the customer's balance. Although the write-off of the customer's account balance occurs at the same time for book and tax, the recognition of the expense for book may occur in an earlier period than for tax. In the year that the allowance for doubtful accounts accrual is recognized, taxable income will be greater than book income for this transaction and the income taxes paid to the IRS will be greater than the book income tax expense. The difference creates an income tax asset. When the write-off of the customer's account balance occurs, there is no longer a difference in the bad debt expense for book and tax relating to that customer's account and the income tax asset for this transaction no longer exists.

A simple example to illustrate this follows. A company has \$1,000 in sales for the year and estimates bad debt expense to be three percent of sales or \$30. They identify no customers in that year for which they do not expect payment. As a result, book income includes \$30 of bad debt expense but the calculation of taxable income does not. If no other book tax differences exist, other expenses were \$700, and the income tax rate is forty percent, taxable income would be \$300 and income taxes payable would be \$120. Given the same assumptions, book income would be \$270 and income tax expense would be \$108 resulting in deferred tax asset of \$12. If in the subsequent year, the company had \$1,200 in revenue, \$800 in expenses and the only book tax difference is the write off of \$20 in customer balances, taxable income would be \$380 and income taxes payable would be \$152. Since the write off would be charged to the allowance for doubtful accounts in the subsequent year and not an expense account, book income would be \$400 and income tax expense would be \$160. The \$8 difference would decrease the deferred tax asset. The remaining \$4 deferred tax asset would be eliminated when an additional \$10 in write offs occur.

Bad debt expense is a very simplistic example of the creation of a deferred tax asset. The concept applies to almost all accruals that result in an expense. Although GAAP and the IRC both require accrual accounting for most enterprises, they are very different. GAAP follows the matching principle; revenue and the expense resulting from the generation that revenue occur simultaneously.

The IRC generally allows a deduction when the expense is paid. The timing of those two events may be quite different resulting in a deferred tax asset.

The difference in the recognition of book and tax depreciation is often the source of a deferred tax liability. For book purposes, the characteristics of the asset provide the basis for an estimate the life of a depreciable asset. For tax purposes, IRS Revenue Ruling 87-56 generally determines the life of the asset. The depreciation method most commonly used for book purposes is straight-line. The Modified Accelerated Cost Recovery System (MACRS) generally determines the life of the same asset for the calculation of tax depreciation. The total depreciation over the life of the asset is the same under both methods; however, the timing of the depreciation expense is usually very different. Since the tax depreciation method is usually more aggressive than the book depreciation method, taxable income in the early years is less than the book income associated with a given asset. In these years, the amount paid to the IRS is therefore less than the income tax expense resulting in a deferred tax liability. In the later years of the life of the depreciable asset, the depreciation expense for book purposes will be greater than the tax depreciation and the deferred tax liability will decrease to zero.

For example, a company purchases a \$1,000 asset on the first day of the year that they estimate to have a ten-year life and they use straight-line depreciation. In accordance with MACRS, the same asset will depreciate over a five years. In this example, book depreciation would be \$100. MACRS depreciation will be \$350. Given a forty percent tax rate, that \$250 difference will result in a \$100 deferred tax liability. After five years when there is \$500 of accumulated depreciation for book purposes and the asset is fully depreciated for tax purposes, the deferred tax liability will be \$200. In the sixth through the tenth years, book depreciation will be \$100 and tax depreciation will be zero. That \$100 difference, given the tax rate is still forty percent, will reduce the deferred tax liability by \$40 each year until the deferred tax liability is zero.

3. The Impact of a Change in Tax Rates on the Valuation of an Entity.

The January 17, 2018 Wall Street Journal includes a headline "Citi Takes \$22 Billion Tax-Law Hit." The article states this twenty-two billion dollar expense resulted in the largest quarterly loss in the



bank's history. In a separate article, "Citigroup Can Take This Hit" the author stated, "Loosing tens of billions of dollars is rarely caused for celebration, but that looks to be the case for Citigroup." The market appears to agree, the stock rose .4 percent that day to \$77.11. Why? The twenty-two billion dollar expense did not change the valuation of the bank. That may seem strange, but it is the result of the characteristics of the expense resulting from the write down of a deferred tax asset.

Citi's deferred tax asset account has two components. The first component is tax credits and operating loss carry forwards. The amount of future income exempt from income tax multiplied by the income tax rate determines their value. When the income tax rate decreased from thirty-five percent to twenty-one percent, the value of that asset decreased by forty percent. The amount of income for which the bank will not incur a tax liability in the future did not change. Recharacterizing the impact of the change in income tax rates, the change in income tax rates had no effect on future cash flows. If discounted future cash flows determine the valuation of the bank, it too did not change as a result in the decrease in income tax rates.

The second component of Citi's deferred tax asset account is timing differences. Most of these differences result from accruals, provisions for future expenses recognized for book purposes that are not deductible for tax purposes until the expected transaction occurs. The remainder of these timing differences results from revenue included in tax income for which book revenue recognition is not complete. In either case, no future tax payments are due on the amount of the timing difference. Prior to the change in income tax rates, the deferred tax asset was valued at the thirty-five percent rate, the rate when the tax was paid. The decrease in the income tax rate to twenty-one percent caused a decrease in the value of the deferred tax asset since the amount of the tax on the reversal of the timing difference has decreased by forty percent. However, since they are no future payments relating to the timing difference, there is no future cash flow impact and thus no change in the valuation of the company. The fact that the income tax payment when the income tax rate was thirty-five percent and the income tax rate is now twenty-one percent also has no impact on the valuation of Citi. The reason, the

cash flow already occurred, future cash flows determine the valuation of the company.

Citi incurred a huge operating loss caused by the decrease in value of their deferred tax assets without any impact on the valuation of the company. The effect of the change in federal income tax rates on the deferred tax assets on any entity will be the same as it was for Citi. The expense associated with the write-down of their deferred tax assets will have no effect on their future cash flows and therefore should have no effect on the valuation of their company.

In contrast, the reduction in deferred tax liabilities does have an impact on the valuation of an entity. Deferred tax liabilities result from timing differences. If, for the same transaction, a tax expense in the current period is greater than the expense recognized for book income or income tax revenue recognized in the current period is less than the revenue included in book income, the result is a deferred tax liability. The amount of the future income tax payments that will be required resulting from the reversal of the timing differences determines the deferred tax liability. Since a twenty-one percent tax rate rather than the thirty-five percent tax rate determines the amount of the future tax payments, the amount of the federal deferred tax liability will decrease by forty percent. The offset to the revaluation of the deferred tax liability is a one-time increase in income. The reduction in the income tax rates also reduces projected future cash outflows required for tax payments, which increases the valuation of the company.

4. The Indefinite Deferral Hypothesis

In a strong, viable company, the replacement of fixed assets and the addition of new fixed assets are continuous. In these cases, tax depreciation expense is usually greater than book depreciation expense. Given constant income tax rates and continuous growth in fixed assets, the deferred tax liability associated with depreciation continues to grow. The indefinite deferral hypothesis speculates that since the deferred tax liability never declines, the payment of income tax associated with the reversal of the tax depreciation will never occur. No cash payments means no impact on cash flows resulting in no impact on the valuation of the company.

Constant income tax rates are required if the deferred tax liability to have no impact on income or cash flows. However for 2018 and beyond, federal income tax rates declined by forty percent. That decline



reduced many deferred tax liabilities in the current year by forty percent. The future tax payments on any reversal of these deferred tax liabilities also decreased by forty percent increasing future net cash flows. The increase in the valuation of the entity resulting from these cash flows occurs only once and is determined when the tax rates change. Since financial analysts regularly modify GAAP prepared financial statements to meet their needs, once they incorporate the initial impact of the income tax rate change into the valuation of the entity they are evaluating, proponents of the indefinite deferral hypothesis can once again apply its principles in their analysis.

5. Required GAAP Disclosures

In order to prepare an appropriate analysis of the impact of the change in federal income tax rates on current income and deferred taxes, certain information is required. Current Financial Accounting Standards Board (FASB) and Securities and Exchange Commission (SEC) standards require disclosure of much of the needed information.

The SEC requires separate disclosure of income applicable to federal income taxes, foreign income taxes and other income taxes (FASB Accounting Standards Codification (FASC) 235-10-s99-1h). Any analysis of financial statements to determine the valuation of an entity in the past has used this information to determine the impact of the income tax rates of various jurisdictions and foreign governments to estimate income and cash flows. Any current analysis will use this same information; however, the impact of change in income tax rates potentially decreased federal income tax expense by as much as forty percent and increased net income applicable to federal income taxes by as much as 21.5 percent.

The change in income tax rates also had a significant impact on the valuation of deferred tax assets and deferred tax liabilities. The FASB requires that any adjustments to deferred taxes resulting from changes in tax rates resulting from the "Tax Cuts and Jobs Act," be included in income from continuing operations in the fiscal year that includes December 22, 2017 (FASC 740-10-45-15). This requirement potentially distorts estimates

of future income and cash flows since the recording of the income associated with the revaluation of deferred taxes occurs in the current year and only occurs one time. However, the revaluation of deferred tax assets has no cash flow impact in future years and the revaluation of deferred tax liabilities affects cash flows in the year in which the temporary differences reverse. Current GAAP provides some basis for the estimation of the impact of the change in income tax rates on future cash flows by requiring the disclosure of different components of income tax expense for adjustments of deferred tax assets or liabilities resulting from changes in income tax rates (FASC 740-10-30-26). In addition, GAAP requires that once income tax expense or benefit is determined, income tax expense or benefit for continuing operations should be determined independent of the other components of income or loss (FASC 740-10-50-10). Together, the information required by these two standards provide a better representation of income from current operations to estimate future net income and cash flows than what GAAP requires to be presented on the Income Statement. A third GAAP standard requires the disclosure of the tax effect of each type of temporary difference that are a significant portion of deferred tax assets or liabilities (FASC 740-10-50-6,8). The information obtained from these disclosures can provide insight into the timing of the reversal of these temporary differences.

6. Conclusion

The financial press has published a significant number of stories subsequent to the December 2017 tax legislation regarding deferred tax accounting adjustments impact on corporate income, both positive and negative. This article concludes that a decrease in a deferred tax asset and the resulting expense has little or no impact on the valuation of an entity. Alternatively, the decrease in deferred tax liabilities does increase the valuation of an entity for the decrease in future cash payments is real. Subsequent to the determination of the initial impact of the decrease in corporate income tax rates on deferred tax assets and liabilities on the valuation of an entity, deferred taxes can once again be considered an accounting aberration.



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