

# Impact of Deferred Tax Facility on Firm Value

**Differences in corporate tax law and accounting regulations add to the complexities and cost of compliance of firms. A liberal corporate tax law aims to increase the growth by deferring tax collection to the future. This article focuses on the impact of deferred tax on the value of firms, and the importance of 'harmonisation of corporate tax law and accounting regulations with simultaneous reduction in corporate tax rate' for the benefit of both the corporate sector and the Government.**

**T**ax laws in several countries, including those in India allow firms to leverage certain provisions of income tax to defer tax liability to the future. Though Indian companies have been exploiting this facility for a long time, the information on the deferred tax system was not available to the public until 2000. In 2001, Accounting Standard-22 (AS-22) came in force, which required all companies to disclose any tax deferred. Governments are offering this facility and bearing the cost since it helps to create fresh investments in the economy and hence contributes to overall economic growth. This scenario puts the companies concerned in a very advantageous situation, and as such, should ultimately reflect on the value of the firm if the benefits are really large and significant. We examined the tax deferred by the BSE-100 companies as on March 2005 (or December 2004 for companies which close the year in December) to understand the impact the deferred tax has on their value.

## Sources of Deferred Tax Liability

The concept of deferred tax is notional. The



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tax law does not allow specifically anyone to defer the tax. It simply provides a methodology for computing taxable income and then the tax on taxable income. Deferred tax arises if some of the tax provisions are liberal in allowing expenditure more than expenditure normally shown in computing profit for a period. Chambers (1968) points out that because of the mixing of fiscal and policy functions in an income tax law, the amount of taxable income of any taxpayer need not be the same as the amount of pre-tax income calculated by applying the prevailing rules of accounting. Accounting regulations require the difference to be recorded in the balance sheet either as future tax liability or tax asset. A number of authors argue the need for considering the time value of the tax liability to reflect the true value of the liability and additional cash flow that is generated on account of deferring the tax liability (Jeter and Chaney, 1988 and Waugh, 1968). Guenther and Sansing (2004) also proved that the value of deferred tax liability depends on tax depreciation rate and discount factor.

Often, it is difficult to assess which of the two methods used to compute profits (accounting based vs. tax regulation based) is correct in computing profit, particularly when several accountingscams have revealed many incentives for managers for underestimating expenses of the period to show high profit. If one believes that the expenditure accounted by the firm is correct, any tax provisions offering a higher expenditure deduction in computing taxable profit provide a scope for deferring the tax to the future. In other words, if there are differences in the way in which profits are derived in the

books of accounts and for tax purpose, and if we believe profit derived under books of accounts that is higher than taxable profit is the right one, then the tax paid is less than the tax payable as per books of accounts. This difference of tax saved is not often a permanent saving and this has to be paid in the future once we completely exhaust the benefits.

There are several expenditure items, which provide such differences and a dominant source is the treatment of depreciation under the books of accounts and tax laws. In general, when any capital expenditure incurred by a firm is charged against revenue over the years, it offers a source of difference if there are differences in the quantum of expenditure charged against revenue under the books of accounts and tax purpose. Often,

tax laws, in order to maintain uniformity and simplicity, allow a conservative but uniform rate at which the capital expenditure has to be charged against revenue whereas firms apply a different and lower rate based on the actual benefit derived from the assets. An analysis of sources of deferred tax liability shows a number of such sources, and among them, depreciation is a dominant mode of deferring tax.

Table-1 shows the sources of deferred tax, firms that used such sources, and the quantum of deferred tax attributed for the source. Among the sources, differences in depreciation between the books of accounts and tax books account for 94.75% of the total deferred tax liability of BSE-100 companies. In Rupee terms, this source accounts for Rs.

**Table-1: Sources of Deferred Tax of BSE-100 companies as on March 2005**

No.	Source of Deferred Tax	Companies which availed the source	Amount (Rs. in Cr.)	%
1	Depreciation	78 companies	41,318.14	94.75%
2	Fiscal allowances on fixed assets	HLL, ITC & M&M	936.95	2.15%
3	Interest Accrued	Canara Bank, Allahabad Bank	292.26	0.67%
4	Lease Adjustments	SBI, MRPL, HDFC	253.54	0.58%
5	Deferred Revenue	ONGC	193.83	0.44%
6	Product Development Cost	Tata Motors	73.20	0.17%
7	Provision for diminution in value of investments	Canara Bank, Union Bank	48.90	0.11%
8	Capital Expenditure claimed as Revenue Expenditure under the IT Act	Maruti Udyog and Tata Steel	47.86	0.11%
9	Other Timing Differences	L & T	31.81	0.07%
10	Fixed Assets -Excess of Net block over written down value	Cummins India & Tata Steel	25.40	0.06%
11	Export Incentives	Cipla	3.97	0.01%
12	Voluntary Retirement Scheme	Union Bank	3.63	0.01%
13	Assets held for sale	Glaxosmithkline	2.40	0.01%
14	Others - unspecified		376.31	0.86%
	Gross Deferred Tax Liability		43,608.20	100%
	Deferred Tax Assets		13,250.98	
	Net Deferred Tax Liability		30,357.22	

41,318.14 crores against the gross deferred tax liability of Rs. 43,608.20 crores and 78 companies out of 100 companies have used this source to defer tax. The next source of deferred tax is fiscal allowances of fixed assets, which accounts for 2.15%, followed by interest accrued but not considered as income for tax purposes (0.67%). Though, there are few other sources that have been used by these 100 companies for deferring the taxes, their importance — both in terms of amount deferred and the number of companies using such sources — is very low.

### Large Tax Deferring Firms

Table 2 shows tops 10 firms, which deferred the tax to the maximum limit. The list covers several public sector firms, particularly oil companies.

Company	Deferred Tax Liability	Deferred Tax Asset	Net Deferred Tax
Oil & Natural Gas Corp. Ltd.	8,058.65	2,614.80	5,443.85
Indian Oil Corp. Ltd.	4,478.57	173.23	4,305.34
Reliance Industries Ltd.	4,633.46	366.64	4,266.82
Steel Authority Of India Ltd.	3,032.05	1,187.74	1,844.31
Hindustan Petroleum Corp. Ltd.	1,444.62	33.84	1,410.78
GAIL (India) Ltd.	1,375.16	119.93	1,255.23
Hindalco Industries Ltd.	1,129.70	0	1,129.70
Bharat Petroleum Corp. Ltd.	1,098.74	129.71	969.03
Indian Petrochemicals Corp. Ltd.	1,081.16	113.93	967.23
Tata Steel Ltd.	1,607.41	777.99	829.42
Other 90 BSE-100 Companies	15,668.68	7,733.17	7,935.51
Total Tax Deferred/paid in-advance	43,608.20	13,250.98	30,357.22
% Of Top 10 Firms on total tax deferred	64.07%	41.64%	73.86%

An analysis of companies deferring taxes shows a clear A-B-C classification. The top

10 companies out of 100 companies have deferred 73.86% of total tax deferred by the 100 companies. Among the 10 companies there are only three private sector companies (Reliance Industries, IPCL and Tata Steel) and out of these (IPCL) was till recently with the government. The seventeen public sector companies in the sample of BSE-100 account for 60.41% (Rs.19,811.92 crores) of total tax deferred by the 100 sample companies. While tax deferred by the public sector companies is significant; the real impact of the same on revenue may not be significant. Instead of the government receiving revenue from tax and spending it on the public, these public sector companies reinvest the same in the economy. Though the same logic applies to tax deferred by the private sector, the only difference is the inability of the government directing where the tax deferred should be invested in the economy.

There are eight companies in our sample, which have not used this deferred tax facility. These are Bank of Baroda, Indian Overseas Bank, UTI Bank, and Reliance Capital, Dr. Reddy's Lab, JSW Steel, Petronet LNG and Tata Teleservices. Twenty-eight companies in the sample have shown deferred tax assets. This group mainly consists of banking and financial services companies (Rs. 2,306.75 crores) and the dominant source of deferred tax asset is the provision of doubtful debts/non-performing assets and employee wage revision, Voluntary retirement schemes, etc. The top five companies, which have net deferred tax assets, are BHEL (Rs. 518.28 crores), State Bank of India (Rs.475.68 crores), Oriental Bank of Commerce (Rs. 235.00 crores), HLL (Rs. 225.90 crores) and MICO (Rs. 169.69 crores). The total amount of deferred tax asset of all sample companies is Rs. 13,250.98 crores and companies, which have net deferred tax asset, have outstanding deferred tax asset of Rs. 2,440.11 crores.

### Deferred Tax and Growth of Firms

Our earlier analysis shows that an important source of deferred tax is differences in

depreciation values claimed under income tax and depreciation actually charged to profit and loss account. Since the total depreciation should not be more than the value of the asset, the accelerated depreciation under income tax will lead to a situation of no depreciation in terminal years of the asset forcing the company to pay more tax than what it should pay at that time. However, it saves such additional tax in the initial years when accelerated depreciation is in force. In other words, the company benefits from the time value of money equals to present value of tax deferred in the initial years and paid later. Tax deferral has long been recognised as a desirable strategy because of the time value of money. An economic benefit received today (i.e., taxes not paid) has greater value than an equal benefit received at some point in the future. Conversely, a cost incurred at some point in the future (i.e., taxes paid) is less detrimental than an equal cost incurred today. A cost that can be deferred and never paid is even better (Fender and Miller, 1997).

The time value of deferred tax for a zero-growth firm, which invested Rs. 100 in year 0 and claims a depreciation of 25% for income tax purpose under written-down value (WDV) method and charges 15% straight line method for the profit and loss account with a tax rate of 35% and cost of capital of 12% would be Rs.1.17.

In other words, for a zero-growth firm, the present value of deferred tax with the above-assumed numbers is 1.17% of the value of the assets invested. In the above situation, the firm initially defers the tax but subsequently pays the amount. However, if we relax the condition of zero-growth and allow the firms to invest only to the extent of depreciation amount claimed under the books of assets on the same type of asset, then it is possible to get a positive deferred tax benefit up to 20 years and thereafter the tax payable under both the accounting methods would be the same. Table 3 shows the relevant computation. The present value of the deferred tax in such a situation would be Rs. 9.46. The firm is entitled to Rs. 15 every year in new assets such that the net block value is always set to 100. On the other hand, if the firm was able to invest an amount equal to depreciation claimed under income tax purposes every year, then it is possible to enjoy a positive deferred tax benefit for up to 40 years. The present value of the deferred tax benefit is Rs. 12.96. The firm has to invest Rs. 25 every year to set the net block value at Rs. 100 under this condition. If the firm invests more than the depreciation of the particular year, then the present value of tax savings would increase further. For instance, if the firm invests Rs. 50 every year then the present value of deferred tax saving would be Rs. 21.72.

**Table 3: Present Value of Deferred Tax (Reinvestment Equal to Book Dep Rate)**

Year	BOOKS OF ACCOUNTS			TAX ACCOUNT			Deferred Tax	PV of Deferred Tax
	Op. Net Block	Depreciation	Cl. Net Block	Op. Net Block	Depreciation	Cl. Net Block		
0	100.00	15.00	85.00	100.00	25.00	75.00	3.50	3.13
1	100.00	15.00	85.00	90.00	22.50	67.50	2.63	2.09
2	100.00	15.00	85.00	82.50	20.63	61.88	1.97	1.40
3	100.00	15.00	85.00	76.88	19.22	57.66	1.48	0.94
4	100.00	15.00	85.00	72.66	18.16	54.49	1.11	0.63
5	100.00	15.00	85.00	69.49	17.37	52.12	0.83	0.42
6	100.00	15.00	85.00	67.12	16.78	50.34	0.62	0.28
7	100.00	15.00	85.00	65.34	16.33	49.00	0.47	0.19

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8	100.00	15.00	85.00	64.00	16.00	48.00	0.35	0.13	
9	100.00	15.00	85.00	63.00	15.75	47.25	0.26	0.08	
10	100.00	15.00	85.00	62.25	15.56	46.69	0.20	0.06	
11	100.00	15.00	85.00	61.69	15.42	46.27	0.15	0.04	
12	100.00	15.00	85.00	61.27	15.32	45.95	0.11	0.03	
13	100.00	15.00	85.00	60.95	15.24	45.71	0.08	0.02	
14	100.00	15.00	85.00	60.71	15.18	45.53	0.06	0.01	
15	100.00	15.00	85.00	60.53	15.13	45.40	0.05	0.01	
16	100.00	15.00	85.00	60.40	15.10	45.30	0.04	0.01	
17	100.00	15.00	85.00	60.30	15.08	45.23	0.03	0.00	
18	100.00	15.00	85.00	60.23	15.06	45.17	0.02	0.00	
19	100.00	15.00	85.00	60.17	15.04	45.13	0.01	0.00	
20	100.00	15.00	85.00	60.13	15.03	45.10	0.01	0.00	
100	100.00	15.00	85.00	60.00	15.00	45.00	0.00	0.00	
<i>Present Value of Deferred Tax Benefit</i>									12.96

**Table 4: Present Value of Deferred Tax (Reinvestment Equal to Tax Dep Rate)**

Year	BOOKS OF ACCOUNTS			TAX ACCOUNT			Deferred Tax	PV of Deferred Tax
	Op. Net Block	Depreciation	Cl.Net Block	Op. Net Block	Depreciation	Cl.Net Block		
0	100.00	15.00	85.00	100.00	25.00	75.00	3.50	3.13
1	110.00	16.50	93.50	100.00	25.00	75.00	2.98	2.37
2	118.50	17.78	100.73	100.00	25.00	75.00	2.53	1.80
3	125.73	18.86	106.87	100.00	25.00	75.00	2.15	1.37
4	131.87	19.78	112.09	100.00	25.00	75.00	1.83	1.04
5	137.09	20.56	116.52	100.00	25.00	75.00	1.55	0.79
6	141.52	21.23	120.29	100.00	25.00	75.00	1.32	0.60
7	145.29	21.79	123.50	100.00	25.00	75.00	1.12	0.45
8	148.50	22.28	126.23	100.00	25.00	75.00	0.95	0.34
9	151.23	22.68	128.54	100.00	25.00	75.00	0.81	0.26
10	153.54	23.03	130.51	100.00	25.00	75.00	0.69	0.20
11	155.51	23.33	132.18	100.00	25.00	75.00	0.59	0.15
12	157.18	23.58	133.61	100.00	25.00	75.00	0.50	0.11
13	158.61	23.79	134.82	100.00	25.00	75.00	0.42	0.09
14	159.82	23.97	135.84	100.00	25.00	75.00	0.36	0.07
15	160.84	24.13	136.72	100.00	25.00	75.00	0.31	0.05
16	161.72	24.26	137.46	100.00	25.00	75.00	0.26	0.04
17	162.46	24.37	138.09	100.00	25.00	75.00	0.22	0.03

18	163.09	24.46	138.63	100.00	25.00	75.00	0.19	0.02
19	163.63	24.54	139.08	100.00	25.00	75.00	0.16	0.02
20	164.08	24.61	139.47	100.00	25.00	75.00	0.14	0.01
21	164.47	24.67	139.80	100.00	25.00	75.00	0.12	0.01
22	164.80	24.72	140.08	100.00	25.00	75.00	0.10	0.01
23	165.08	24.76	140.32	100.00	25.00	75.00	0.08	0.01
24	165.32	24.80	140.52	100.00	25.00	75.00	0.07	0.00
25	165.52	24.83	140.69	100.00	25.00	75.00	0.06	0.00
100	166.67	25.00	141.67	100.00	25.00	75.00	0.05	0.00
<i>Present Value of Deferred Tax Benefit</i>								12.96

Table 5 shows the fixed assets (net block) growth rate of BSE-100 companies as a group. The average growth rate of the last five years is about 10%. If all companies are able to show this growth rate in the future, then the present value of tax savings on account of deferred tax would be equal to 6.13% of the current fixed assets value i.e. 56,4430 crores (or Rs. 34,624.30 crores in terms of present value of tax savings). As noted earlier, any drop in the growth rate or stoppage of the growth rate would affect the tax-deferred part and the firm would start paying the deferred tax from then onwards.

Value of Fixed Assets	Value	Growth
As on March 2000 or December 1999	34,9510.12	-
As on March 2001 or December 2000	37,8551.41	8.31%
As on March 2002 or December 2001	42,9475.58	13.45%
As on March 2003 or December 2002	45,9822.10	7.07%
As on March 2004 or December 2003	49,6364.21	7.95%
As on March 2005 or December 2004	56,4430.01	13.71%
Average Growth Rate		10.10%

An analysis of individual growth rate of companies shows a wide variation and hence the ability to defer the growth rate permanently depends on the growth opportunities available to each firm. As mentioned earlier, if the firms are at least reinvesting the depreciation value in fixed assets, then it is possible to defer the tax saved of the current year forever. The growth rates of fixed assets of BSE-100 firms for the four quartiles are 5.08%, 9.42%, 20.27% and 154.96% respectively over the last five years.

### Impact of Deferred Tax on Stock Value

Deferred tax is a source of funds, free of cost. The impact on stock prices depends on the number of years up to which firms are able to defer the tax. Under the extreme assumption that it can permanently defer the tax but there is no growth rate of deferred tax, the market value of the firm would be higher to the extent of deferred tax since the present deferred tax would add to the free cash flow. Amir and Sougiannis (1999) show an evidence for a strong positive relation between deferred taxes from carry forwards and share prices, suggesting that these carry forwards are valued as assets. Lee (1998) also finds an association between the stock prices and present value of deferred tax.

The ratio of deferred tax to market capitalisation of BSE-100 companies shows a marginal impact of market capitalisation of the companies. As on March 31, 2005, the total market capitalisa-

**Table 6: Deferred Tax as a percentage of Total Liability and market capitalisation**

Company	Deferred Tax (Rs. in Cr.)	Total Liability (Rs. in Cr.)	DT / TL	DT/Market Capitalisation
Ultratech Cement Ltd.	581.71	3,709.49	15.68%	13.19%
Indian Petrochemicals Corp. Ltd.	967.23	7,720.80	12.53%	23.85%
National Aluminium Co. Ltd.	652.45	6,207.44	10.51%	5.81%
Century Textiles & Inds. Ltd.	243.03	2,386.21	10.18%	11.68%
Gujarat Ambuja Cements Ltd.	381.09	4,057.24	9.39%	5.28%
Tata Chemicals Ltd.	353.38	4,591.93	7.70%	10.84%
Hindalco Industries Ltd.	1,129.70	15,114.49	7.47%	9.41%
Hindustan Petroleum Corp. Ltd.	1,410.78	19,059.39	7.40%	13.59%
Chennai Petroleum Corp. Ltd.	550.82	7,458.86	7.38%	16.07%
Grasim Industries Ltd.	599.50	8,149.24	7.36%	5.39%
All Firms	30,357.22	2,347,841.83	1.29%	2.38%

tion of BSE-100 companies was Rs. 1,273,953.27 crores and the net deferred tax liability was Rs. 30,357.22 cr. The impact of deferred tax on the market value of BSE-100 firms would be just 2.38%. The impact of deferred tax can also be examined on the assumption that if the firm has not deferred the tax and has paid the tax, then it should have borrowed the amount or raised fresh equity. The cost saving, if assumed to be permanent, can be discounted to the present value and its impact can be seen on the market value.

Assuming that the firm saves an after-tax interest amount of 6.5% [ $10 \times (1 - \text{tax rate of } 35\%)$ ] and discounting the interest saved by the cost of capital of 12%, the impact of the deferred tax on the value of the BSE-100 companies would be 1.29%. The impact of deferred tax is not very high since its contribution to the firms total funding is just 1.30%. Though the impact of deferred tax on the value of the firm is not very high at aggregate levels, its contribution is significant in many cases. Table 6 shows the firms with a high-deferred tax to total liability. For many firms, the contribution of deferred tax as a source of funding is significant as is their impact on market value. These firms by ensuring their growth rate, can leverage the deferred tax

to increase their value further.

However, the impact of deferred tax on the value of the firm for a large number of sample companies is not significant. It raises a basic question whether such differential treatment of income and expenditure between the books of accounts and tax law is worth continuing for a long time. The incentive was considered important at one point of time when India was struggling to achieve a decent economic growth rate and the cost of borrowing was high. However, with the current boom in the economy and low interest rates, the need for continuing such complicated regulations is questionable. The cost of compliance of such dual accounting can be reduced if the law is simplified and income tax law starts following the books of accounts as the basis of tax computation. It might call for a discussion between tax authorities and Accounting Standard Setting bodies to harmonise the two systems. The incremental borrowing cost arising out of this change of new regulation can be set right by lowering the corporate tax rate by 5% and disallowing the dual accounting system to avoid any major negative impact in the stock market for such disallowance. The loss of income to

the shareholders is proportional to the deferred tax funding in the total capital. If one ignores extreme values and negative values of deferred tax liabilities, the contribution of deferred tax on the total liabilities is around 7%. It means such companies have to pay this amount and borrow the same or raise fresh equity, which in turn adds up cost. Incremental cost and its impact on profit are shown in Table 7.

are different. Such deferral may be temporary if the company is not growth oriented or it can be permanent if the company at least invests the depreciation of the year in its fixed assets. Any additional investment offers a growth to the firm and hence the tax deferred will also grow at that rate. In that sense, deferred tax provides a true economic value to firms. However, the need for such an incentive system

**Table 7: Impact of Deferred Tax Withdrawal on Profitability**

	With Deferred Tax	Without Deferred Tax
Shareholders Fund	650.00	650.00
Debt @ 10%	280.00	350.00
Deferred Tax @7% of Total Capital	70.00	0.00
Total Capital	1,000.00	1,000.00
Sales	2,000.00	2,000.00
COGS @ 80% of Sales	1,600.00	1,600.00
PBIT	400.00	400.00
Interest	28.00	35.00
PBT	372.00	365.00
Tax	130.20	127.75
PAT	241.80	237.25
Estimated Tax Rate Reduction to reach indifference level under old and new system		4.55

Table 7 highlights the fact that the additional cost is marginal and it can be suitably compensated if the tax rates are adjusted by 5%.

## Conclusion

Many Indian companies prepare two sets of profit statements – one for the shareholders and one for tax computation purposes. Assuming the profit statement prepared for shareholders reflects the true and fair value, then many companies defer the payment of tax by using certain provisions of the Act. Though there are several sources for deferring the tax, differences in the depreciation rate followed under the Companies Act and Income Tax Act

in a market where growth rate is determined by economic forces can also be questioned. Consistent with several efforts in simplifying the law and its enforcement, it is desirable to simplify the law and follow one set of books of accounts for both shareholders and tax authorities. The market may react negatively in a few cases, where the deferred tax is high. A few percentage points cut in tax rate (about 3%) would be adequate to avoid any negative market sentiment. □