

Tithing and business profits: the issue of depreciation and other expenses

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Introduction

The proximate motivation of this short note is Cyril Domb's *Maaser kesafim* (*The tithing of money*) (1992). The present writer submits that there is here an opportunity for increased interdisciplinary exchange.

We are required to consider seriously the amount of business profit which should be given by way of *Maaser kesafim* (The tithing of money).

Yet many in good faith pay incorrect amounts – at worst less than they intend - through failing to appreciate how application of quite legal accounting concepts can lead to halachically incorrect calculations of what should be given. Just as accounting profits are differently defined for tax purposes, for income legally available for dividend to various classes of shareholder, for distribution to investors in hybrid instruments such as income bonds, for incentive payments to managers and other staff, for calculation of borrowing capacity, for transfer pricing in an international group and for insurance purposes, so must a distinct measure of profit be arrived at as the basis for *maaser kesafim*.

There is a danger of complacency leading to error if the criteria are applied without sufficiently careful analysis. Allowable expenses are those 'incurred in earning a profit' (Domb, p.59). With particular respect to depreciation (p. 83) he quotes Dayan I.J.Weiss' prescription of 'normal equitable accounting procedure as between partners'. The problem is that many widely used procedures lead to an incorrect base and hence incorrect charitable donation.

The purpose of this short note is accordingly to submit that halachic issues arise within depreciation and other business expenses which merit the attention of our decisors. Many measures which comply perfectly with law and accounting conventions may not satisfy the criteria for *maaser kesafim* leading to incorrect donations.

While the focus of the present note is *maaser kesafim*, this issue is not the only reason for us to be interested in depreciation. For example but hours before submitting this paper the writer had the advantage of attending a discussion on *Talmud Babli Baba Metzia* 38a and its commentaries. These discussions address, *inter alia*, the duties of a *shomer* (bailee) left in charge of goods which deteriorate or appreciate in a way which offsets deterioration.

Accounting profits

There are many ways of computing accounting profits which lead to widely differing profit figures and not all deductions – however legitimate and within the bounds of permissible discretion - truly coincide with ‘expenses incurred in earning a profit’. To see this we must ask what motivates a business’ choice of basis of computation. There are many influences. The business may wish to convey a particular signal to the market. For example a low figure for reported profit may stifle pressure to pay higher dividends thus preserving funds for investment. It may wish to smooth profits on the grounds that undue reported volatility harms the share price. The business may use bases which serve politics or incentivisation rather than optimal economic reporting.

Permissible preference for an accounting method may affect the tax burden. From his experience as an auditor the writer recalls protracted disputes involving auditor, tax authorities and management concerning timing of recognition of accruing profit on long-term contracts.

Other opportunities for discretionary reporting of higher or lower profits are capitalisation of research and development, advertising and small tools. Within ordinary trading, profit can be recognised at the time an order is paid in advance, at the time of shipment, when the plant is installed at the customer’s premises or at the conclusion of a warranty period. Goodwill has long been used to optimise financial reporting. The United Kingdom Shareholders Association (2004) complained:

Goodwill now has to be written off, but the period used is still to some extent discretionary and management has become adept at presenting earnings in many different ways, which confuses everyone. For example, the prominently displayed earnings figure in press releases and annual reports can be that after adding back goodwill and/or after adjusting for exceptional items (and there is still common abuse about what is classified as exceptional).

Management must furthermore ask whether expenses tactically charged to reserves should equitably be taken from profits. How many 'extraordinary' charges taken below the profit line are most accurately expenses of the current year?

Legitimate as they may be, such adjustments may fall short of the criteria 1) that profits should be calculated 'not less favourably than between partners' (Domb, p. 45) and 2) that deductions should truly reflect 'expenses incurred in earning a profit' (p. 59). The above examples are not the most complex. For instance consider a recorded pension fund liability which impounds a substantial shortfall. A major actuarial exercise would be required to determine the true charge appropriate in the accounts; quite apart from the fact that international differences in the reporting of pensions raise issues as to which is nearest to the true economic charge.

Of course some income adjustments transgress both law and accounting convention. It is obvious that these simply cannot reflect tithable profits.

The purpose of the above examples has been, before focussing on depreciation, to submit the general point that, in arriving at tithable profits, management should take a hard look at their balance sheet and income statement and not assume that income recorded is the most appropriate for tithing purposes.

Depreciation

Lets clear the decks immediately by distinguishing colloquial meanings of depreciation from depreciation charges which are appropriate for accounting. Colloquially we equate depreciation with fall in price. This is not appropriate for accounting since fall in price reflect decline in usefulness of an asset. Sometimes we informally equate depreciation with periodic physical deterioration. This conflates decline in usefulness of the asset with other outlays such as maintenance.

Accounting depreciation by contrast sets out to allocate the cost of an asset less its salvage value over the asset's life. Management have to ask:

- 1 How far does our chosen concept of depreciation coincide with the halachic criterion?
- 2 Is there available another method which is more compliant or must we accept an unavoidable minimum of arbitrariness?
- 3 Within our method are we using the right numbers?

Inflation

A number of inflation-related issues will arise as the discussion proceeds but it is useful initially to look at it separately. Assume inflation is in force. Consider a machine with a 5 year life purchased for £100 in year one with a salvage value of nil. If it is being written off by simple straight-line depreciation based on initial monetary cost then, for example, Year 3's income will suffer a charge of £20. Thus if profits before depreciation are £160 they will be reduced to £140. But the machine was purchased in year-one pounds and the numeraire for year-three's accounts is year-three pounds. Twenty year-three pounds is surely not the 'expenses incurred in earning a profit' (Domb, p.59) since the initial sacrifice incurred was 100 year-one pounds. The advocates of current purchasing power accounting recognise this. If 100 year-one pounds had the same purchasing power as 130 year-three pounds, they would burden year three's income with a charge of $130/100 \times 20 = £26$. Domb, (*ibid* p.47) quotes Rabbi S.Z.Auerbach to the effect that profits arising from devaluation are not liable to *maaser*. Now profit which has been increased by understating a depreciation charge undoubtedly contains a devaluation element attributable only to devaluation. And note further the following from Rabbi S.Z.Auerbach's responsum (*ibid* p.48):

If the house was purchased for 1,000 and sold for 2,000, one must assess how much the 1,000 used in the purchase would be worth today in relation to the 2,000 obtained in the sale.

When assets are revalued a recorded surplus or deficit will appear in the accounts even if the benefit or detriment remains unrealised. The gain or loss may be credited to a reserve or, if it is a case of the goods in which the business deals, to the income account. Domb (*ibid* p.45) reports that he could 'find no specific guidance in the

sources' on this matter. However he suggests that the idea of partnership might lead to treating the profit on revaluation as tithable only when realised. As far as operating income is concerned this line of thought leads its being tithable when it accrues, in accordance with ordinary commercial practice. However he reports that according to Rabbi S.Z.Auerbach and Rabbi M.Feinstein, *maaser* has to be paid only when the proceeds are actually received.

Historic cost depreciation

As stated earlier depreciation in conventional accounting sets out to allocate the cost of an asset less its salvage value over the asset's life. This convention - still standard - echoes the double-entry bookkeeping mechanics and economic circumstances which prevailed in fifteenth century Italy at the dawn of modern accounting. For the specific short-lived ventures of the time the method duly disciplined the recovery out of profits of capital invested. However the modern commercial fact of an inflationary environment in which businesses are long-term continuities should all alert managers to the danger that historic cost depreciation may not best reflect the expense incurred in earning a period's profit as required for *maaser kesafim*.

Even within historic cost different bases yield different profit figures. Which truly best reflects the operating burden on the period's income? It's convenient to return to the machine which cost £100, has an estimated five-year life and a final salvage value of nil. Annual profits before depreciation are £160.

Straight line depreciation would burden each year's profits with 20% of cost, i.e. £20. Declining balance depreciation calculates annual depreciation at a fixed rate on the net book value of the asset, i.e. on the cost of the asset less depreciation to date. A rate of 60% would reduce the asset to its salvage value of nil after 5 years:

Declining balance

Year	Book value at beginning of year	Depreciation charge at 60%	Book value at end of year
1	£100	£60	£40
2	40	24	16
3	16	10	6
4	6	4	2
5	2	2	0

Declining balance might be the best reflection of the expense incurred in earning periodic profit if an asset were at its most productive in its early years.

The double declining balance (DDB) method applies double the straight line amount to the declining balance.

Double declining balance

Year	Book value at beginning of year	Depreciation charge at 20% x 2	Book value at end of year
1	£100	£40	£60
2	60	24	36
3	36	14	22
4	22	9	13
5	13	13	0

The sum-of-the-years digits method uses the following formula:

Periodic depreciation charge = (Cost – Salvage value) x Fraction

If the life of the machine is n years the fraction is as follows:

Calculation of fraction

Year one: $n / (1+2+3+\dots+n)$

Year two: $(n - 1) / (1+2+3+\dots+n)$. In our case $(5 - 1) / (1+2+3+4+5) = 4/15$

The periodic charge for year 2 would accordingly be:

$$(\pounds 100 - 0) \times (4/15) = \pounds 27$$

Sum of the years' digits

Year	Cost minus Salvage value	Formula	Charge
1	£100	$(\pounds 100 - 0) \times (5/15)$	£33
2	100	$(\pounds 100 - 0) \times (4/15)$	27
3	100	$(\pounds 100 - 0) \times (3/15)$	20
4	100	$(\pounds 100 - 0) \times (2/15)$	13
5	100	Write-down to salvage value	7

Bothersome though these calculations are, management's question for *maaser* remains a simple practical one: are the charges the best reflection of the expenses incurred in earning profits? It may accordingly be that, before accepting any of the foregoing for *maaser* purposes, management should give careful consideration to two further methods which are perhaps the most intuitively acceptable. One is based on the periodic level of activity and the other on the units produced per period. Both may best impound the greater productivity of an asset in its early years.

The following Table, which includes all the discussed methods except those based on activity and production, points up how greatly the impact of depreciation on profit can vary across methods. In the last analysis management has to accept the fact that it faces a technical question founded on allocation of cost which should not be conflated with questions of tax, signalling strategy, accumulation of resources for replacement or solvency.

Comparison of charges under different methods

Year	Straight line	Declining balance	Double declining balance	Sum of the years digits
1	20	60	40	33
2	20	24	24	27
3	20	10	14	20
4	20	4	9	13
5	20	2	13	7

Note: activity and production-based methods would give further variants

Even if a preferred depreciation basis has been settled management still has to ask whether the numbers for cost, estimated life and residual value have been unduly influenced by prudence or expediency.

Replacement cost depreciation

A basic choice is between depreciation based on the historic cost of the asset and depreciation based on its replacement cost. Both are defensible as ‘normal equitable accounting procedure as between partners.’ Replacement cost depreciation sets aside out of profits sufficient to replace the asset at the end of its working life. This is appropriate for enterprises which span generations. They are a ‘microcosm of society at large’ (Prest 1969, p. 293).

Replacement cost depreciation does not necessarily and totally cut loose from cost allocation. Management’s aim, in addition to providing for replacement, may be to maintain the real value of the money capital invested in the business. They may think with this in mind that replacement cost depreciation best sets against the revenues of a period the costs of the same dimension.

Pragmatic arguments in favour of replacement cost depreciation are that historic cost depreciation leads to the reporting of unsustainably high profits, ill-grounded wage demands and even irresponsible expansion (*ibid* p. 295). But do charges justified in this way reflect costs incurred in earning current profits?

The arguments advanced by accounting theorists against replacement cost depreciation reinforce the writer’s concern about its appropriateness for

computing tithable profits. A major such argument is rooted in corporate governance as much as in economics. By setting out to retain sufficient funds for replacement of assets the implied brief of replacement cost depreciation is ‘to preserve income permanently intact’ (*ibid*). This is valid only if we assume constant re-equipment rates and categories. This may do violence to shareholders’ preferences. They may prefer to deploy their investment elsewhere via capital distributions or enhanced dividends or to see appropriate deployment of retained earnings. At all events ‘preservation of income permanently intact’ does not, except by chance, coincide with income arrived at by deducting costs incurred in earning current revenue.

Theoretical discussion apart there may be economic incentives to prefer replacement cost depreciation in order to depress reported profits. For example, in contracts with public authorities lower reported profits might justify higher permitted prices.

Conclusion

Choice among accounting methods including the methods of charging depreciation may be entirely legal and in perfect accordance with accounting convention but may produce a figure for income which is incorrect as a basis for calculating *maaser kesafim* and can therefore lead to substantially incorrect charitable giving.

References

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Talmud Babli, (Babylonian Talmud), Tractate *Baba Metzia*, 38a.