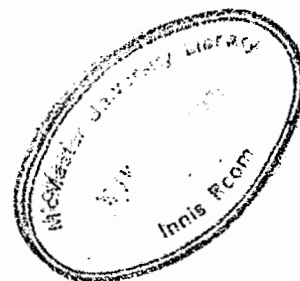




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**THE IMPACT OF GENERAL AVERAGING ON
INCOME REALIZATION DECISIONS:
A CAVEAT ON TAX DEFERRAL**



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The Impact of General Averaging on Income Realization Decisions:

A Caveat on Tax Deferral

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Many individuals are faced periodically with large increases in their income. These might arise from such sources as the sale of a piece of property which is regarded as a receipt of income; the withdrawal of a large lump sum from a tax shelter such as an RRSP, perhaps, to invest in a small business; the closing of a real estate sale resulting in a large commission; the realization of a large taxable capital gain, etc. In most of these cases the individual can control the timing of the income realization, particularly when the decision is made at the end of a year. The conventional wisdom might suggest that the payment of tax on such income should be deferred as long as possible. This belief is reinforced by the availability and popularity of tax deferral programs such as RRSP's, DPSP's, MURB's, deferred annuities and others. However, it can be shown that under certain conditions involving a large increase in income, tax deferral is not the better option.

Individuals and their financial advisors may tend to overlook the tax savings resulting from the general averaging provisions of the Income Tax Act (s. 118). These provisions are often regarded as complex and they are applied automatically in the assessment procedure. As a result, there is less tendency to analyze these provisions in detail and to utilize them to the individual's advantage. The purpose of this paper is to examine the details of the general averaging provisions and to show how they might be used to advantage in certain cases.

An Analysis of General Averaging

When the computation of tax is based on the use of a progressive rate schedule, fluctuating income patterns generate higher taxes than smooth

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income patterns over a given period. To alleviate the resulting inequity, the Income Tax Act provides for a general averaging process in s. 118. This process can be represented algebraically as follows:

$$T = T_1 + 5(T_2 - T_1) \text{ when } Y_T \geq D \quad (1)$$

and

$$T = 5T_3 \text{ when } D > Y_T \quad (2)$$

where

T = federal tax before reductions in the current year;

T_1 = federal tax before reductions on $Y_T - D$;

T_2 = federal tax before reductions on $.8Y_T - D + .2Y$;

T_3 = federal tax before reductions on $.2(Y-D)$;

Y_T = threshold income, i.e., the greater of 110% of the preceding year's net income and 120% of the average of the four preceding years' net income;

D = personal and other deductions taken in computing taxable income for the current year; and

Y = net income in the current year.

Note that the threshold income (Y_T), the deductions (D) and, therefore, T_1 are independent of net income (Y) in the current year. Hence, an increase in that net income affects tax in the current year through five times its impact on T_2 . As can be seen by the definition, T_2 is changed by the additional tax on only 20% of the change in net income, thereby eliminating much of the progression.

The progression in the tax rates is eliminated in general averaging by effectively spreading over five years excess income which is computed by reference to a base established from past incomes. In comparison, forward

averaging¹ spreads the excess income over a base of future incomes, but the spreading can take place over more than five years. Since this excess can be spread over more than five years, in most cases forward averaging will result in lower taxes. This provides the benefits of less progression in the tax rates and tax deferral. However, in cases such as a large permanent increase in income, the higher marginal tax rates to which the deferred income is subjected will offset those benefits.² Furthermore, the application of forward averaging is restricted, thereby requiring an understanding of the effects of general averaging.

An Example

Consider the following facts based on an actual case. An individual currently has income of \$9,000. In past years this income has increased at about the same rate as inflation and it is expected to continue to increase from the \$9,000 level in this way. Thus, the income in the following year would be \$9,810 as a result of a 9% increase. In the current year the individual has sold property resulting in an increase to his normal income of \$15,000.

The individual in this case is faced with the following decision. He can sell more property for additional income of up to \$39,000 in the last week of his current fiscal year providing a range for income in the current year of \$24,000 to \$63,000. Alternatively, he can defer the sale or part of the sale resulting in the realization of up to \$39,000 in the first week of the following fiscal year providing a range for income in the next year of \$48,810 to \$9,810.

¹Forward averaging can be thought to include both the use of an income averaging annuity contract under s. 61 or the possible use of a special reserve under either s. 20(1)(n) or s. 40 of the Income Tax Act.

²Arthur Rosentzweig, "Forward Averaging with IAAC's," CA Magazine, (December 1977), p. 38.

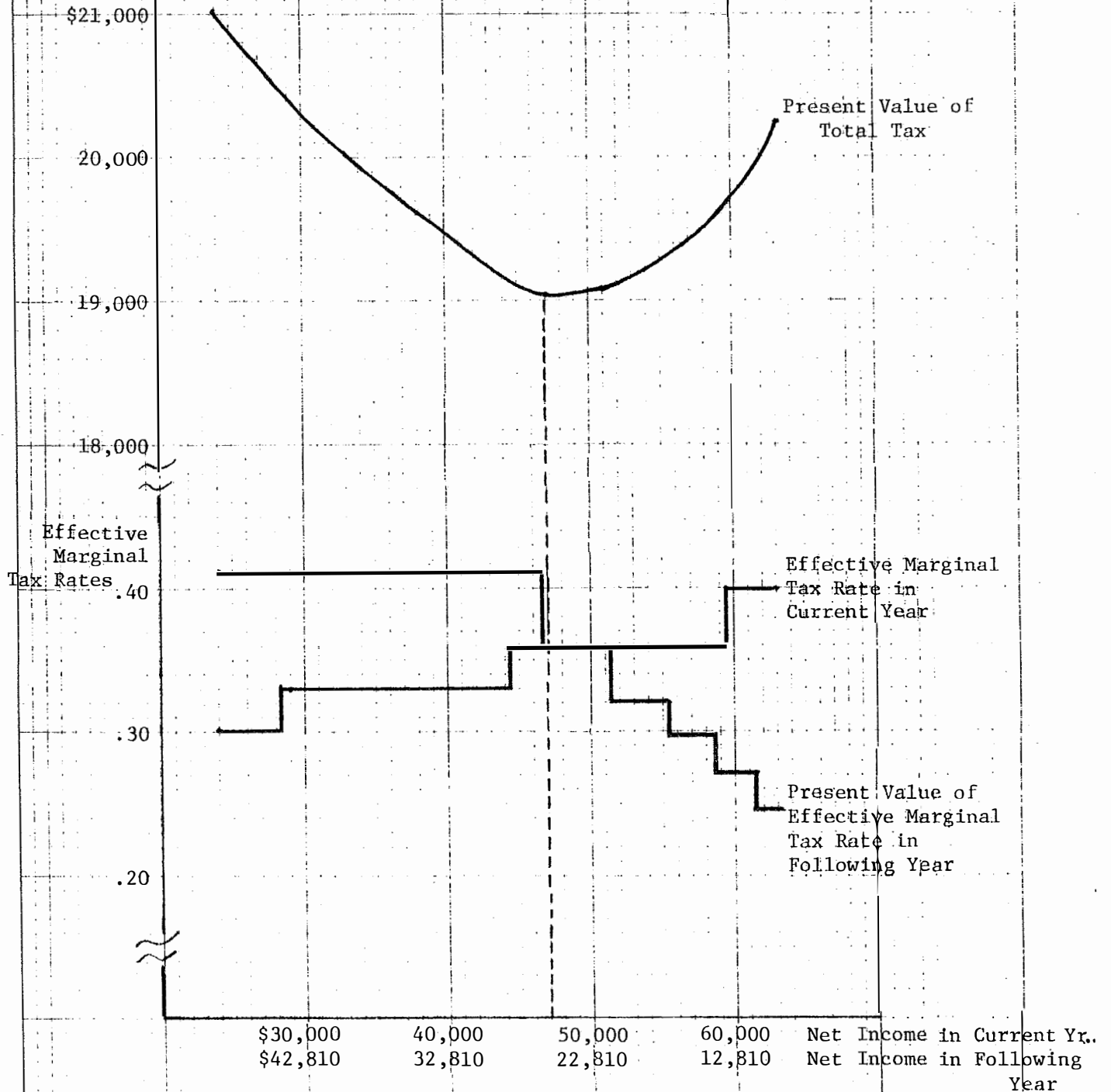
As indicated previously, the conventional wisdom might suggest taking the deferral option on as much income as possible. The tax on the resulting \$24,000 of income in the current year and the \$48,810 of income in the following year would total \$21,035 when the present value of the following year's tax is computed at 12%. However, Figure 1 shows that the correct decision would be to take an additional \$23,000 in the current year bringing total income for the current year to \$47,000 and to defer the remaining \$16,000 to the following year when total income would be \$25,810. This would result in total tax with a present value of \$19,050 which represents a tax savings of almost \$2,000. The process graphed in Figure 1 shows that it is profitable to continue to realize income in the current year until the effective marginal tax rate in the current year equals the present value of the effective marginal tax rate in the following year. The effective marginal tax rate in a year is the rate at which an additional \$1 of income is taxed under the general averaging provisions.

In summary, the following effects should be considered in the analysis of a decision to either realize or defer income. In general, the deferral of income and the consequent tax deferral is better than immediate realization. Furthermore, the indexing of personal tax brackets increases this benefit. However, for certain income patterns as exhibited by the foregoing example, these benefits can be offset by the effects of general averaging in the current year. The increase in the current year's income must be relatively large for significant tax savings to result from general averaging. This might arise in many situations including, for example, the disposition of property owned by a non-working spouse as was the case in the example presented.

FIGURE 1

Present Value of Total Tax and Effective
Marginal Tax Rates for Different Income
Realization Patterns

Present Value
of Total Tax



The Deductions Anomaly³

An interesting peculiarity of the general averaging approach can be observed from the formulae presented above. Consider the hypothetical case of an individual earning about \$20,000 annually whose income for the year is increased to \$120,000 by an extraordinary transaction. With general averaging, the tax on this income of \$120,000 for an individual with the minimum personal deduction of a single person would be \$50,800.

Now assume that the individual increases his deductions by making a discretionary charitable donation of \$19,400. This amount, when added to the basic personal deductions provides total deductions which are approximately equal to the individual's threshold income of \$22,000 (i.e., 110% of \$20,000) for general averaging. Referring to equation (1), when deductions (D) equal threshold income (Y_T), federal tax on Y_T minus D is nil and the federal tax (T_2) on $(.8Y_T - D + .2Y = \$19,670)$ is about \$4,200. The federal tax (T) would then be five times \$4,200 or \$21,000 and the total tax including the provincial tax in Ontario would be about \$29,700. Thus, a charitable donation of \$19,400 has resulted in a tax savings of \$21,000 (i.e., \$50,800 - 29,700) for a net "profit" on the donation of \$1,700 (i.e., \$21,100 - 19,400).

The foregoing case is, admittedly, not likely to be very common. It does demonstrate dramatically, however, the use of discretionary deductions in the calculation of taxable income and the effects of those deductions on the general averaging process. In essence, the tax savings from such a deduction is magnified by five times, thereby reducing considerably the after-tax cost of a discretionary deduction such as charitable donations.

³The authors are indebted to Mr. J. Michael Lavery, C.A., Partner in the firm of Deloitte, Haskins & Sells, Chartered Accountants, for bringing this to our attention.

The effect is present, to a lesser degree, in what might be considered more common cases. For example, consider the case of an individual earning about \$20,000 annually whose income for the year is increased to \$40,000 by an extraordinary gain. With general averaging the tax on this income of \$40,000 for an individual with the minimum personal deductions of a single person would be \$13,230. However, a charitable donation of \$1,700 would result in total tax of about \$12,055 by the process demonstrated above. Thus, a donation of \$1,700 would reduce taxes by about \$1,175 (i.e., \$13,230 - 12,055).

The qualification of this case for general averaging may provide the individual with an opportunity to make a charitable donation at a relatively lower cost than would usually be the case. Normally, an income of \$40,000 would be taxed at a marginal rate of 52% in the Province of Ontario. Thus, a \$1 charitable donation would have an after-tax cost of \$.48. Note that the marginal tax rate on income of \$40,000 subject to general averaging in the case presented is lower than 52%. Thus, it might be thought that the after-tax cost of a charitable donation would increase because the tax shield effect is reduced at the lower tax rate. However, since general averaging is based on a threshold income which can be reduced by deductions such as charitable donations, the after-tax cost of such a donation may be reduced considerably. In the case at hand it can be reduced to \$.31 for a \$1 donation.

The foregoing analysis would suggest that, when an individual is faced with an abnormal increase in income resulting in the application of general averaging, donations should be increased in the current year, perhaps by consolidating future donations. Such arrangements would seem possible in many situations where amounts which qualify as charitable donations are committed regularly over a period of years.

Conclusion

This paper has presented an analysis which suggests that individuals who experience a large, extraordinary increase in income should consider explicitly the advantages of general averaging in comparison with those of deferral where a choice between the two is available. Furthermore, the analysis suggests that general averaging offers an opportunity for some individuals to reduce the after-tax cost of discretionary deductions such as charitable donations and, perhaps, certain medical expenses which might be advanced.

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