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User's Guide For

TAXMGT

Federal and Minnesota Income Tax Management and Analysis In the 1976 and Later Tax Years

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Dear Mr. Farm Manager,

Income tax management is becoming an increasingly important aspect of farm financial management. The purpose of the TAXMGT Computer Decision Aid is to suggest strategies that may help you make your tax management decisions.

This User's Guide is designed to assist you in doing an accurate job of gathering the necessary information to be analyzed and in making a correct interpretation of the analysis results printed out by the computer. A brief index of the major sections of this guide follows:

Changes in tax regulations make frequent updating of this User's Guide necessary. This November, 1976, version is intended for use in 1976 and following tax years. When an updating is required, you will be informed by an appropriate message at the beginning of the computer run.

With best regards,

The Authors

INTRODUCTION*

How TAXMGT Works

TAXMGT, Computer Decision Aid #205, is designed to help you estimate your taxes due in the current and immediately following year. It then evaluates various tax strategies--income and expense shifting, depreciable asset purchases and Federal income averaging--to aid you in making your year-end tax management decisions.

To use TAXMGT you must first record a summary of your income, expenses and other personal and financial information, projected to the end of the current year, on an input form. When entered into the computer, the output will then show the current year's Federal, State and social security taxes due, along with appropriate guidelines for reducing taxes. For the most useful analysis, you should also input estimates of how your income and expense situation will be changed next year. Output will then show both the actual and discounted value of taxes due in the next year. It will also indicate various strategies that may be used to reduce taxes between the two years.

Assumptions and Limitations

For TAXMGT to be useful, income and expense projections must be accurate. You are encouraged to modify your data and make numerous runs to study the affects of different projections on your tax situation. Certain assumptions have been made by the authors:

1. It is assumed that the basic tax calculations will not change next year.

2. In the "spouse's income" section of the input form (line 130) it is assumed that the spouse's income is lower than that of the principal taxpayer. If not, enter the spouse's income as that of the principal taxpayer and vice versa.

3. It is assumed that no income is foreign to the United States or to Minnesota.

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*TAXMGT was originally developed to be comparable to a similar computer program developed by Stephen Harsh and Michael Kelsey at Michigan State University (Teleplan/Touch-Tone Phone Program TT #05, Form 4). Minnesota tax law, however, requires that computations be quite different.

COMPLETING THE INPUT FORM

The input form for TAXMGT is CDA 205. All blanks on the right-hand side of the input form are to be completed and entered into the computer. Other blanks are included only for your calculations.

Input is entered into the computer line by line, using the appropriate line numbers (100 - 250). Each item of data entered into the computer is also assigned an item number. These item numbers are to be used only when making changes for yext year's situation on lines 200 - 250.

Name and Address

At the top of the input form you will find spaces to enter your name and address. The computer will ask for this at the beginning of the run. You have 20 spaces for each. This information is used only as a heading for your output.

Line 100 - Description of the Analysis

Line number 100 should be used to label your output. If you are making a number of runs, use this line to identify them.

Line 110 - Farm Income and Expense for the Current Year

Line 110 on page 1 of the input form includes data items 1 through 4. This information relates to your farm income and expenses for the current year. The corresponding section of Form 1040 for each item of data is indicated.

Item 1 - Sales of Purchased Livestock and Other Items Purchased for Resale (Schedule F - Part I)

a.	Total sales to date	$________		
b.	Estimated sales to end of year	+________	=	________
c.	Less purchase cost		-	________
d.	Net profit on items resold			________

Item 1 - Sales of Purchased Livestock and Other Items 110, ________,

Item 1: Enter the net profit on items purchased and resold. On most farms cattle and hogs from finishing operations are the major items here. This corresponds to the first section of Part I on Schedule F.

Item 2 - Farm Sales and Other Farm Income (Schedule F - Part I)

a. Total sales to date $________
b. Estimated sales to end of year (include gas tax credit from previous year) +________
c. Total sales ________

Item 2 - Farm Sales and Other Farm Income ________,

Item 2: Enter the sum of sales of market livestock, produce raised for sale and other farm income. Key items to include are custom work, the Federal gasoline tax credit from last year's return and patronage dividends. This item corresponds to the section of Part I on Schedule F headed "Sales of Market Livestock and Produce Raised for Sale and Other Farm Income". Where possible, look at last year's return to check for reasonableness.

Item 3 - Farm Deductions (Schedule F - Part II)

a. Total farm expenses to date $________
b. Estimated expenses to end of year +________
c. Estimated depreciation for year +________
d. Total farm deductions ________

Item 3 - Farm Deductions ________,

Item 3: This entry corresponds to the total deductions calculated in Part II of Schedule F. Be sure to keep tract of expenses which could be paid either in the current year or in the following year. This may help you evaluate the benefits of income and expense shifting. Such items include farm management association dues and computerized record keeping fees. Items which might be purchased (and delivered) near year-end are farm supplies such as tools and repair parts, seed, fertilizer and major repairs.

Item 4 - Summary of Ordinary and Capital Gains and Losses (Form 4797 and Schedule D)	
a. Net ordinary gain or loss (Form 4797 - Part II)	______
b. Total short-term capital gains minus short-term capital losses plus long-term capital gains minus long-term capital losses x 50% (Schedule D - Part III)	+ ______
c. Net gain or loss (a + b)	______
Item 4 - Summary of Ordinary and Capital Gains and Losses	______

Item 4: Since gain and loss calculations can be very complicated, we suggest that you work through your expected year-end gains and losses on Form 4797 and Schedule D. Item 4 is then the total of net ordinary gains and losses from Part II of Form 4797 plus the total net gain or loss from Part III of Schedule D. Note that the 50% long-term capital gain exclusion should be subtracted out before entry.

Remember to include short-term gains and losses and to deduct the undepreciated cost on purchased breeding livestock. Also, include nonfarm capital sales such as shares of stock.

Line 120 - Summary of Nonfarm Income

In order to handle self-employment tax and Minnesota income tax considerations, the principal taxpayer's and his spouse's income must be handled separately. Line 120 contains information about the principal taxpayer's nonfarm income. The spouse's income is entered on line 130. If the spouse's income is higher than that of the principal taxpayer, enter the spouse as the principal taxpayer.

Item 5 - Total Wages and Salaries Received by the Principal Taxpayer	120,	______,
Item 6 - Farm Partnership Income		______,
Item 7 - Other Nonfarm Earned Income		______,
Item 8 - Last Year's Federal Income Tax Paid		______,
Item 9 - Last Year's Minnesota Income Tax Refund Received by Principal Taxpayer or Through Joint Reporting		______,
Item 10 - Taxable Dividends and Interest		______,
Item 11 - Taxable Rents and Other Non-Earned Income		______

Item 5: Enter the principal taxpayer's off-farm wages and salaries received in the current year on which income tax and social security were withheld.

Item 6: Enter partnership income on which income tax and self-employment tax are due.

Item 7: Enter all other earned income from the current year on which income tax and self-employment tax are due.

Item 8: Enter the Minnesota net Federal tax deduction for last year's taxes paid. (Federal taxes paid less refund received.)

Item 9: Enter the amount of last year's Minnesota income tax refund. This amount will be added to Federal taxable income in the current year.

Item 10: Enter taxable dividends and interest received in the current year.

Item 11: Enter other current year income which is <u>not</u> wages, salaries, or self-employed income.

<u>Line 130 - Spouse's Income</u>

<u>Item 12</u> - Spouse's Federal Adjusted Gross Income	130,	________,
<u>Item 13</u> - Spouse's Minnesota Adjusted Gross Income		________,
<u>Item 14</u> - Spouse's Minnesota Tax Deductions (Zero if Item 28 = 0. Use assumes no tax credits.)		________

Item 12: Enter spouse's current year Federal adjusted gross income.

Item 13: Enter spouse's Minnesota adjusted gross income.

Item 14: Enter spouse's Minnesota Federal tax deduction (usually gross Federal tax withheld). Enter a zero if the standard deduction is taken (if Item 28 is zero).

Line 140 - Self-Employed Retirement Plan Contributions, Investment Credit and Itemized Deductions

Item 15 - Amount Paid on Self-Employed Retirement Plan	140,	________,
Item 16 - Investment Credit Eligible Purchases with 3-4 Years Life		________,
Item 17 - Investment Credit Eligible Purchases with 5-6 Years Life		________,
Item 18 - Investment Credit Eligible Purchases with 7 or More Years Life		________,
Item 19 - Estimate Your Itemized (Joint) Federal Deductions		________

Item 15: Enter the amount paid during the current year on a self-employed retirement plan (Keough Plan). Under current limitations, a self-employed individual can contribute 15% of net income from self-employment up to a maximum of $7,500 to suchaplan.

Item 16 to Item 18: Enter the dollar amounts of capital purchases made during the current year that qualify for investment credit in each of the three depreciable life categories (whether new or used). Be sure to check eligibility.

Item 19: Enter an estimate of your current year's Federal itemized deductions including last year's State income tax paid. The program will compare the amount inputted with the standard deduction and select the best option.

Line 150 - Other Current Year Information

Item 20 - Number of Exemptions Claimed	150,	________,
Item 21 - Filing Status: single . . . . (1) married filing jointly . . . . (2) married filing separately . (3) head of household . . . . . . (4) widow(er) with dependents . (5)		________,
Item 22 - Is the Tax Year Complete (yes = 1, no = 0)		________

Item 20: Enter the number of exemptions claimed. Persons over 65 receive two exemptions. Parents can claim an exemption for a dependent child. If over 19 and earning over $750, the child must be enrolled in school at least five months of the year. Regardless of the child's earnings, the parents must provide over 50% of the child's expenses.

This same value is used to calculate State tax credits. For State tax purposes, a half-year can be entered as half an exemption. For example, an entry of 4.5 would indicate four full exemptions plus six months. The program would round up to 5 for Federal purposes.

Item 21: Enter the number for your filing status for the current year.

Item 22: Enter a one if the current tax year is complete (after December 31 but before filing time) and a zero if it is not. If complete, the program will not evaluate income and expense shifting.

Lines 160 and 170 - Income Averaging

Item 23 - Test Income Averaging? (yes = 1, no = 0)	160,	________
Item 24 - Taxable Income 1 Year Ago	170,	________,
Item 25 - Taxable Income 2 Years Ago		________,
Item 26 - Taxable Income 3 Years Ago		________,
Item 27 - Taxable Income 4 Years Ago		________

Item 23: If your current year's Federal taxable income is at least $3,000 greater than the average of your previous four year's taxable incomes, income averaging is available to you. Enter a one if income averaging will be evaluated. If not, enter a zero and go on to Item 28.

Item 24 to 27: Enter your Federal taxable income for the past four years. (Form 1040 - Part III.)

Line 180 - Minnesota State Tax Information

Item 28 - State Deductions	180,	________,
Item 29 - State Non-Personal Credits		________

Item 28: Enter the principal taxpayer's (or all for married filing) estimate of State tax deductions. To take the standard deduction (10% of Minnesota adjusted gross income to a maximum of $1,000) enter a zero.

Item 29: Enter the total of all non-personal Minnesota tax credits (personal credits are calculated by the program). These include the credits for agricultural electricity, pollution control, rent, non-public schools and senior citizens.

Line 190 - Next Year's Tax Conditions

Item 30 - Number of Exemptions Next Year	190, ________,
Item 31 - Filing Status Next Year	________,
Item 32 - After-Tax Discount Rate	________

Item 30: Enter your expected number of exemptions for next year.

Item 31: Enter the number of your expected filing status next year from those listed under Item 21.

Item 32: Enter your after-tax discount (present value) rate. This rate is used to discount next year's taxes due to equate the value of tax savings then with tax savings now. If a zero is entered the computer will assume a 10% rate.

To estimate your discount rate, first consider what is the highest rate of return you can expect from your money before taxes. Savings bank interest puts a floor on this rate. Add the expected inflation rate to this rate and reduce this total by the percent taken by taxes.

For example, if you feel you can get a return of 8% before taxes on an investment in your business, that the inflation rate will be 4% in the coming year and your marginal tax bracket is 33%; estimate your discount rate as follows:

After-tax discount rate = (8% + 4%) x (1.00 - .33) = 8%.

Line 200 - 260 - Estimates of Next Year's Tax Changes

Line #	Item #	Sign & New Value	Explanation
200,	______,	______	______
210,	______,	______	______
220,	______,	______	______
230,	______,	______	______
240,	______,	______	______
250,	______,	______	______

Lines 200 to 260 are used to adjust the previous items (those for the current year) to estimate next year's situation. Up to six changes can be made. Items which can be changed are items 1 - 19. There are two ways to make changes:

1. Estimate next year's value as a percent of this year's. Then enter this as a negative value. For example, if you estimate that next year's sales (item 2) will be 25% higher than the current year's, enter 200,2,-125.

2. Enter the value directly. For example, if you estimate that next year's sales will be $50,000, enter 200,2,50000.

ENTERING THE DATA INTO THE COMPUTER

To run program TAXMGT, first call out the program: OLD, TAXMGT/UN=4530301. Then type: RUN. (This procedure may vary on systems other than MERITSS.) The computer will respond as shown below.

There are two methods of inputting the data: (1) on-line--inputting the data line by line as the computer asks for it, or (2) by a previously prepared data file as shown here.

When inputting on-line, to signal that you are done inputting data, simply hit a carriage return.

If you make an error in typing in a line of input, you will get a chance to change it at the end of the read-in procedure.

```
YOUR NAME   (20 SPACES)                      ? JAMES BROWN

YOUR ADDRESS  (20 SPACES)                    ? SCANAHOVIA, MINN

INPUT METHOD (1=ON-LINE, 2=DATA FILE)        ? 2

DATA FILE NAME (CR=END PROGRAM)              ? ABROWN6

TO SEE THIS DATA FILE TYPE YES (NO=CR)       ? YES


100 JA & JW BROWN, SCANAHOVIA MINN; WITH INCOME AVERAGING, 1976
110 1450 75461 38566 1924
120 0 0 0 1740 0 60 200
130 700 700 95
140 0 800 500 9388 2745
150 5 2 0
160 1
170 9734 9728 5876 5563
180 2130 50
190 5 2 20
200 2 50461


TO CHANGE A LINE, TYPE LINE NO. (CR=NO MORE)?

DIVERT THIS OUTPUT; YES OR (CR=NO)           ?
```

INTERPRETING THE OUTPUT

The output received from TAXMGT will depend upon what input data is included. If only the current year's situation is entered, it will consist of a table showing the current year's Federal, State and self-employment taxes due and the corresponding marginal tax brackets. If next year's situation is entered you will get this same information for next year's taxes plus, if the current year is not yet complete, a section on income and expense shifting. If the previous four year's taxable incomes are entered, TAXMGT will also indicate whether income averaging is beneficial.

Section I - Estimated Federal, Self-Employment and State Taxes Due

This section provides estimates of your taxable income, marginal tax rate and taxes due for Federal, State and self-employment taxes.

JA & JW BROWN, SCANAHOVIA MINN; WITH INCOME AVERAGING, 1976

ESTIMATED TAX DATA	FOR 1976	FOR 1977	2 YEAR TOTAL
TOTAL TAX LIABILITY:			
TOTAL INCOME & EMPLY TAX DUE.$	12193.		
TOTAL DUE BEFORE TAX CREDITS.$	13527.	3256.	16783.
NEXT YEARS TAX DUE PRESENT VALUED AT 20.0%....$		2714.	16240.
TOTAL MARGINAL TAX RATE.....	36.3%	37.6%	
PRESENT VALUED NEXT YEAR'S RATE.......................		31.4%	
FEDERAL INCOME TAX:			
TAXABLE FARM GROSS INCOME....$	76911.	51911.	
TAXABLE NET FARM INCOME......$	38345.	13345.	
ADJUSTED FED. GROSS INCOME...$	41229.	16229.	
FED. TAX DUE WITH AVERAGING..$	7604.	1749.	9353.
INVESTMENT CREDITS...........$	999.		
OTHER TAX CREDITS............$	180.		
NET TAX DUE AFTER CREDITS....$	6425.		
MARGINAL FED. TAX RATE.......	25.0%	22.0%	
FED. TAX DUE W/O AVERAGING...$	9785.	1749.	11535.
WITHOUT AVERAGING TAX RATE....	42.0%	22.0%	
SOCIAL SECURITY TAXES:			
SELF EMPLOYMENT NET EARNINGS.$	38345.	13345.	
SELF-EMPLOYMENT TAX DUE......$	1209.	1054.	2263.
SELF EMPLY MARGINAL/RATE.....$	0%	7.9%	
MINNESOTA ADJUSTD GROSS INCOME.$	38789.	8790.	
STATE INCOME TAX (COL. B)....$	4704.	442.	
ADJUSTED FOR TAX CREDITS AND SPOUSE TAX DUE...........$	4559.	298.	4857.
STATE MARGINAL RATE...........	15.0%	10.2%	

The first five lines indicate your total taxes due. Note that taxes due after credits are estimated only for the current year. The computer does not have adequate information to estimate next year's tax credits. Therefore, all comparisons between the current and next year's situation are made on a before credits basis.

The present value rate equates the value of a dollar of next year's taxes with this year's. It is important to recognize that a dollar of tax savings next year is not worth as much to you as a dollar saved now. This is true because a dollar saved now can be reinvested to earn interest (or a rate of return in the business) in the coming year. Your objective, then, might be to minimize the total of this year's taxes plus the present value of next year's taxes.

The total marginal tax rate indicates the total percentage of your next dollar's worth of income which will be consumed by taxes.

Following this total tax information, the printout breaks down each of the three tax categories. Under Federal taxes, if income averaging information was inputted, take special note of whether the program has recommended averaging. In the sample shown, averaging was beneficial in 1976. If it was not, the fourth line of the Federal tax section would read: "Fed. Tax Due W/O Averaging".

"Other tax credits" include the credit for personal exemptions and the earned income credit, if eligible. Note that if investment credit plus the credit for personal exemptions is greater than Federal taxes due before credits, a portion of the investment credit can be carried back to offset previous taxes paid or carried forward to future years.

Under social security taxes, the marginal tax rate will be the current self-employeemnt rate for incomes up to the maximum set by law ($15,300 in 1976). For incomes over this maximum there is no additional tax so the marginal rate is zero.

The final section deals with Minnesota State taxes. Note that the marginal tax rate for State taxes in Minnesota can be quite substantial and should be considered in tax planning.

<u>Section II - Income and Expense Shifting</u>

If it is not yet the end of the year and income and expense shifting is possible before the books are closed, this section evaluates shifting strategies.

The first table of this section indicates the minimum increase or decrease in taxable income necessary to change your marginal tax rate.

SHIFT IN INCOME NECESSARY TO CHANGE FEDERAL AND STATE TAX RATES

		1976	1977
FEDERAL TAXABLE INCOME IS........	$	34679.	9679.
DECREASE TO LOWER FED RATE......	$	1270.	1679.
INCREASE TO RAISE FED RATE......	$	2730.	2321.
PRINCIPAL'S STATE TAX INCOME IS.	$	36659.	6660.
DECREASE TO LOWER STATE RATE....	$	16659.	1660.
INCREASE TO RAISE STATE RATE....	$	163341.	340.

Potential shifts are evaluated by first looking at the gross taxes due in each year and determining whether income or expenses should be shifted to the following year. Two levels of shifting are then calculated, as shown in the next table. The program first looks at Federal taxable income and chooses the value from the above table which will change the marginal tax rate in both years. The first shift evaluated is then $100 greater than this amount. The second shift is calculated in the same way, but using the principal taxpayer's State taxable income.

APPROXIMATE 1976 & 1977 TAX RATES DUE TO SHIFTING
THE INDICATED AMOUNTS OF ... INCOME ... TO 1977

IF THE AMOUNT SHIFTED IS:	TOTAL MARGINAL TAX RATES (PCT.) 1976	1977	'77 DISCOUNTED AT 20.0%
OVER $ 2421.	(36.3%)	42.2%	35.2%
OVER $ 16759.	(32.9%)	(43.8%)	(36.5%)
NONE	(36.3%)	37.6%	31.4%

NOTE: RATES INSIDE ( ) INDICATE INCOME AVERAGING WAS USED.

TAX LIABILITY AFTER SHIFTING ... INCOME ... TO 1977

AMT. SHIFTED	1976	1977	1976+77	1976+DISCOUNTED'77
$ 2421.	12559.	4067.	16626.	15948.
$ 16759.	6974.	9652.	16626.	15017.
NONE	13527.	3256.	16783.	16240.

The resulting output shows the marginal tax rates resulting from these shifts. These rates can be compared with the marginal rates if no shifts are made. Note that if income averaging was used, the rate is enclosed in parentheses.

The second table of this section shows the gross (before credits) taxes due after these shifts. The ideal shift would approximate the lowest two year total of taxes due. Again, since the present value discount rate equates dollars saved next year with dollars saved now, your objective might be to approach the lowest total of this year's taxes plus the discounted value of next year's taxes.

Following these tables you have the opportunity to test another shift amount. You can test as many shifts as you desire.

```
TEST ANOTHER SHIFT?

 TO SHIFT EXPENSES TO 1977, INPUT A NEGATIVE VALUE;
 TO SHIFT INCOME TO 1977, USE A POSITIVE VALUE:

 DOLLAR AMOUNT OF SHIFT TO TEST (CR = NO MORE SHIFTS)          ?4000

   OVER $  4000.        (36.3%)        42.2%         35.2%


 TAX LIABILITY AFTER SHIFTING ... INCOME ... TO 1977

   AMT. SHIFTED       1976        1977      1976+77   1976+DISCOUNTED'77

   $        4000.    11927.      4664.     16591.     15813.
```

Section III - Tax Implications of a Capital Purchase

This section examines the tax implications of purchasing additional rapidly depreciating, investment credit eligible capital items before the end of the current year. Certain machinery and storage facilities are examples of this type of investment.

```
 TAX REDUCTION IF $1000 IS NOW    (1976)     (1977)
 INVESTED IN NEW CAPITAL            214.        74.

 TAX SAVINGS THIS YEAR EQUAL A 21.4% AFTER TAX DISCOUNT IN PRICE.

 ASSUMES A 7 YEAR LIFE, FULL INVESTMENT CREDIT, ADDED 20% FIRST
 YEAR PLUS DOUBLE DECLINING BALANCE DEPRECIATION FOR 1/2 YEAR.

 MINNESOTA POLLUTION CONTROL CREDIT ELGIBLE INVESTMENTS
 PROVIDE AN ADDITIONAL 5% DISCOUNT EQUIVALENT;
 FEEDLOT  POLLUTION CONTROL DEVICES A 10% DISCOUNT ON PRICE
 AND MAY ALSO BE EXEMPT FROM PROPERTY TAXATION.
```

The tax reduction is calculated by applying your marginal tax rate to the depreciation available on the new item and adding the available investment credit. A seven year life is assumed. Depreciation includes additional first year depreciation plus one-half year's double declining balance depreciation.

Reminder: State tax credits for pollution control have an effect similar to investment credit.

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