

IMPACTS OF SELECTED FEDERAL POLICIES ON GROWTH  
AND SURVIVABILITY OF TYPICAL FAMILY FARMS  
IN A STOCHASTIC ENVIRONMENT

By

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The farm economy is a unique system all its own, so it has unique problems associated with it. Whether people like it or not the government will always be involved in agriculture and as long as there are problems there will be policies attempting to correct them. That seems to be a problem in itself. Too many times policies are enacted to alleviate particular problems that arise. Some direction needs to be developed and policies set forth to meet the goals and objectives of the ones directly affected. I hope my research is a stepping stone in the right direction.

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## CHAPTER I

### INTRODUCTION

Along with other significant changes in the farm economy of the United States during the last 40 years, the number of individuals in the farming sector has declined. Since 1940 the number of farms has been reduced by over half, average farm size has more than doubled, and control of agriculture's production resources has become concentrated into fewer hands. Agriculture's marketing system has become increasingly geared to large-scale producers, as have the businesses that sell fertilizers, seeds, and other production inputs to farm operators. Rising prices of inputs including land together with increasing real asset requirements to form an economic farming unit have increased barriers for entry into farming.

These developments have been part of an agricultural revolution that has boosted productivity dramatically. Technology adopted by agricultural producers not only has resulted in fewer farmers, but also has allowed agricultural output to increase at the rate of about 2 percent annually since 1950 with only modest overall increases in conventional production inputs. Production rising faster than demand for food in recent decades further complicates the situation because the inelastic output demand means that the drop in price more than offsets increased consumption -- hence farm receipts fall when supply outruns demand. The benefits of low real farm commodity prices

to the national economy and to consumers have been enormous. But the cost has also been high for many rural areas in terms of migration to cities, declining populations, and failing small-town businesses. The problems arising from narrow farm profit margins have been aggravated by price and production instability, the increasing assets required for an economic unit, and the necessity for greater debt financing. Increasing leverage ratios of debt to equity especially among newly established farm operators raises chances for illiquidity. Some of the problem may trace to federal fiscal, monetary, and taxation policies as noted by former Secretary of Agriculture Bob Bergland in the forward of Structure Issues of American Agriculture (USDA, 1979):

We have few programs today that deal specifically with farm structure and no comprehensive policy on the subject at all. The rate of agricultural change was so rapid that for 30 years Federal policy could do little more than react. It responded to immediate crises and tried to provide a measure of stability, but in doing so had results that were neither planned nor expected.

Most of the income benefits from traditional commodity programs, for example, go to the largest producers. Our tax laws have favored larger operations and encouraged outside investment in agriculture. And our credit system may well have fostered a kind of economic cannibalism within agriculture by giving aggressive operators the means to buy out their neighbors (Foreward).

The impact of federal tax, spending and inflation policies on farm firms and the farming sector is not well understood.

### Inflation Problems

Inflation impacts unevenly on family farmers over the life cycle of the family farm. Beginning farmers often rely on debt financing to gain a foothold in the industry. Increasing real requirements for an

economic unit are compounded by inflation. Inflation raises costs (mortgage interest rates quickly respond to expectations of inflation) while it deters returns. That is, the "returns" from inflation come as capital gains rather than as higher current rates of return (Tweeten). Capital gains are realized only if the land is sold; meanwhile current or immediate costs continue to rise. Thus inflation increases cash outflow at a faster rate than the cash inflow, leaving less income for family living expenses and for servicing debts. As a result, beginning operators in recent years have needed increasingly higher initial equity ratios, off-farm income or leasing arrangements to survive the cash flow deficits in early years. The cash-flow squeeze associated with farmland indebtedness coupled with the high inflation places hardships on all sectors of the economy but places unique pressures on the agricultural sector because of high capital requirements and the special role of land assets. The causes and effects of existing and continuing cash-flow problems need to be determined for the family farm sector.

#### Taxation Problems

Federal tax policies influence the ability of farm firms to survive and grow. Some contend that interest payment deductions, depreciation allowances and investment tax credits have encouraged established farmers to grow beyond the family economic unit size, thereby accelerating the trend toward larger and fewer farms. Others contend that these tax provisions are essential for family farmers to get a foothold in farming. Because in theory a case can be made in

support of either contention, resolution of the conflicting claims requires empirical analysis.

Since incomes have been taxed in the United States, farmers have been given some favorable options and advantages. For instance, farmers have been entitled to report farm income under cash accounting rules that allow some freedom in choosing the time for realizing income, incurring expenses, and taking tax deductions. Preferential treatment of taxes may have led to some unforeseen and unfavorable results for individuals in the farming industry, especially beginning and low-equity farmers. This preferential treatment has led to assertions that income tax laws impact adversely on the structure of agriculture, abetting the trend toward larger and fewer farms.

Tax laws favor certain kinds of farm asset investments such as farmland, certain improvements to farmland, and even certain animals. The tax laws give incentives for capital investment and place tax burdens on labor in such forms as Social Security, Unemployment Compensation, and Workman's Compensation and may affect the mix of capital and labor in agriculture. Tax provisions may have attracted nonfarm capital into the farm sector, thereby increasing farm output and causing lower prices. Another assertion is that because high-income taxpayers tend to benefit relatively more from most tax exemptions than low-income taxpayers, increasing quantities of farm assets are being controlled by a decreasing number of high-income owners. And since some tax benefits apply only to farm owners and not just farm operators, the tax laws encourage legal arrangements for ownership and operation in ways that may not be consistent with the

family farm ideal. For example, syndicates, corporations, and large commercial farms are said to be encouraged (USDA, 1979).

### Objectives

The primary objective of this study is to determine the effect of federal taxation and fiscal-monetary policies on the opportunity for growth and survivability of typical commercial farms. This research evaluates the ability of a family farm to grow and survive under various assumed scenarios of inflation, initial ownership, yearly income variation, and tax policies. The study examines changes in farm income and balance sheet accounts under alternative assumptions regarding annual variability as measured by coefficient of variation of net farm income. The simulation model adapted from Eginton (1982) determines the 30-year growth pattern of a typical family farm under various economic environments resulting from federal fiscal and monetary policies and how these policies influence the structure of the agricultural sector. Data from the Federal Enterprise Data System typical farm series provide the foundation to simulate the impact of selected federal fiscal and monetary policies on farm survivability and growth. The federal policies evaluated in the study are:

1. Interest payment deductions against taxable income.
2. Depreciation allowances on farm machinery as a deduction against taxable income.
3. Investment tax credits on business equipment and facilities.
4. Inflation rates of 6 and 12 percent.
5. Indexed tax rate schedules for inflation.

Firm growth and survivability using the above policies are estimated from the initial starting positions of:

1. Full ownership of land and machinery.
2. Part ownership with minimum equity in land and 30 percent equity in machinery.
3. All land rented with 30 percent equity in machinery.

#### Hypothesis

Considering the above objective, of interest is the relationship between firm growth and survivorship on one hand and characteristics of the three types of farming situations (full owner, part owner, full renter) and initial equity on the other hand. It is hypothesized that federal policies generate greatest net worth for established farmers -- those who met the demands of the early cash-deficit years and survived to the cash surplus years. That is, established farmers are helped more by tax and inflation policies than beginning or low-equity farmers and hence are able to reduce the cost of debt financing for land purchases. If this hypothesis is supported, the implication is that public policy might be reexamined for changes consistent with encouraging growth up to family size farms and discouraging growth of very large farms.

#### Literature Review

The concept "farm structure" refers to how the farm sector is organized as measured by farm size, farm numbers, tenure patterns, legal organization, input and output markets, and characteristics of agencies and institutions that interact with farmers.



Technology, inflation, and trends in the demand for farm products were blamed for the emergence of chronic excess capacity in agriculture in earlier decades, but Tweeten (1979) singled out redundant farm labor to explain the continuance of low income and rates of return to resources through the 1960s. The farm population accounted for one-third of the national population in 1910, but today accounts for 3 percent. Excess labor is no longer considered an economic problem to the agricultural sector; however, inflation and productivity continue to play an important role in the farm problem.

Farmers are price-takers and have no immediate means to pass on higher input prices. In a study by Tweeten and Griffin (1976) prices paid by farmers and prices received by farmers were separately regressed on the implicit price deflator of the GNP to measure the impact of national inflation on farm prices. The results show that each 1 percent increase in general inflation raised the index of prices paid by farmers 1 percent and raised prices received by farmers by an insignificant amount in the short run. A later study by Tweeten (1980) using a different methodology also concluded that prices received by farmers increased less than prices paid by farmers in the short run with an increase in the general price level.

Given time, the ratio of prices paid to prices received by farmers does not seem to be much influenced by inflation. Potentially more onerous structural implications emerge from the cash-flow impacts of inflation. Many farmers have benefited from inflation by appreciating land values. Research by Tweeten (1980) and Melichar show that as long as significant inflation is expected in land values, returns to ownership of farmland will be split between current net

returns to land and capital gains. During the 1970s capital appreciation in land values constituted the greatest portion of total returns to land. Although some of this appreciation was due to real increases in land value tied to increasing real land earnings, either real or nominal increases in land values cause cash flow problems for new or expanding farmers. Inflation adds a premium to debt-financed farmland ownership costs and returns. But the premium on cost is recognized immediately with higher mortgage interest rates and the returns premium, i.e. capital gain, is not realized until the land is sold. The competitive edge lies with the full owner-operator compared to the low-equity beginning operator for land purchasing. Given similar gross returns, low equity farmers find it difficult to meet the negative cash flows that result from high levels of debt financing relative to current returns; whereas the established owner-operators can in effect obtain a tax exempt status by deferring taxes on current income with continual growth and expansion of the farm.

Depreciation allowances, investment tax credits, and interest payment write-offs create incentives for growth and expansion (Eginton, 1980). In general terms these write-offs in the presence of high inflation and tax bracket creep have reduced the cost of capital investment. Tax benefits tend to be proportional to the relative tax rate on the income sheltered through these rules, so the greatest investment inducement is offered to the wealthiest and highest income taxpayers. Such situations shift the comparative advantage in farming investment away from entry-level or expanding full-time farmers who rely on the farm for income and may hasten the arrival of a future farming structure heavily sided toward (1) absentee landlords, (2) a

few large diversified corporations producing most of the farm output, and (3) a large number of small, part-time farms accounting for most farms in number (Tweeten, 1981a).

### Models

Several types of models have been used to process farm firm data for policy and management analysis. For purposes of this study the flexibility and complexity allowed by dynamic simulation is critical. Simulation is limited in depth of analysis only by one's knowledge and capacity to handle data problems that arise when attempting greater realism through detail in simulation. Simulation permits probability events, deals with sequential time, and allows interaction with capital and operating problems of the farm business (Hutton).

One such model with policy evaluation and analysis was developed by Hardin and later modified by Dean. Dean used a whole-farm scenario for a typical farm in southwest Oklahoma to analyze various commodity programs. His model featuring a ten-year planning period analyzed each commodity program and combinations thereof to see if commodity and all-risk insurance programs restricted or enhanced farm growth and chances of firm survival (Dean).

A deterministic simulation model developed by Eginton (1982) used the USDA's Typical Farm Data Series to identify and depict firm growth under various whole-farm scenarios. Growth in income and net worth of these farms was simulated over a 30-years planning horizon to analyze the affects of different inflation rates and tax policies including interest payment write-offs, depreciation allowances, and investment

tax credits. Eginton found that higher inflation rates had a greater impact on structure of farming by restricting entry of potential owner-operators than by restricting the rate of growth in net worth of persons who were able to enter farming operations. Eginton found that tax provisions had a major impact on growth and explored various options to encourage firm growth to the size of an economic unit and then discourage additional growth. Eginton's deterministic model was not designed to identify the interactions between instability in farming and government programs. An inflationary environment may cause greater structural changes in a stochastic environment because a given equity may be subject to greater chances of being wiped out by random events under the cash flow constraints associated with high inflation rates -- an issue examined in this study.

#### Organization of the Remaining Chapters

Chapter II describes the data used in the analysis including the typical farm. This chapter also reviews key elements in the model such as the coefficient of variation, equity/asset ratio, income averaging and iteration procedures. Chapter III contains the description of the model including the assumptions, parameters and equations associated with the model calculations. Chapter IV examines the results of the simulations, including the effects on farmers of taxes, inflation, and changes in consumption patterns, at various levels of instability and borrowing capacity. Chapter V summarizes the study and concludes with limitations of the analysis and implications for future research.

## CHAPTER II

### A DESCRIPTIVE ANALYSIS OF THE DATA, THE TYPICAL FARM, AND PROGRAMMING CHANGES IN THE SIMULATION MODEL

#### Farm Series and the Typical Farm

The agricultural sector of the United States grows a wide variety of commodities. Each commodity and the region in which it is produced has unique problems and needs. To provide information about American farms, the U.S.D.A. published a cost and returns series for average type-of-production farms by region. As agriculture evolved, these publications of farm incomes and costs for crop, livestock, and other crop production situations were discontinued and replaced by a new, more flexible series.

The new data series provides up-to-date summary information describing the resource base, production levels, and operating budgets on a comparable basis for typical commercial farming operations in the U.S. The data, encompassing most of the major commodities produced throughout the nation, provide useful information on farm receipts, expenses, and balance sheets. The new Firm Enterprise Data System typical farm series provides the basic firm data for the initial operating year of the farms used in this research.

The typical farms are developed from data and information based on the Census of Agriculture, cost of production surveys, and ERS statistical data. A modal size of principal enterprise was selected and the remaining typical farm characteristics were derived from various data sources. A typical farm defined in this manner is not an average farm but is representative of a selected type of farm in a specified area. The key variables for delineating the typical farms, which are designed to be realistic models of commercial farming units, are the size of farm, land and livestock values, total asset value and labor requirements. The typical farm for this study is located in southwest Oklahoma. Key variables for the typical farm associated with this research are: size, 960 acres; land value per acre, \$1,046; livestock value, \$12,905; total asset value, \$1,210,060; and labor required, 2,516 hours.

The Census data used to determine the modal size of the principal enterprises for the typical farm in southwest Oklahoma come from the counties of Cotton, Jackson, and Tillman. Cost of production data and price and yield information are obtained from enterprise budgets developed and maintained by the Federal Enterprise Data System.

The principal enterprises for the typical Oklahoma farm are cotton, wheat, and beef cows. The sizes of the enterprises of the typical farm are: cotton production, 140 acres; wheat production, 420 acres; hay production, 50 acres; pasture land, 320 acres; and 30 beef cows.

A cash flow equation was used to calculate the initial starting positions for the zero cash flow (part-owner) tenure arrangements in the simulation model. The equation was modified to allow a solution

which trades off income against mortgage expense by varying the number of acres under ownership control for a given typical size farm. The initial values for the southwest Oklahoma farm shows a machinery value of \$154,875 and receipts of \$107,166.

The zero cash flow equation has variable income and expense streams that are calculated as follows:

Income from one acre of land X (number acres owned)

+ Family labor earnings

+ Operator management return

+ Machinery equity return

=

Family living expense

+ Mortgage payment/acre

X (1 - Equity requirement)(Number acres owned)

In the first year of the simulation, the rate of inflation affects the expense stream but not the income stream. Differences in inflation rates cause differences in mortgage expenses and in initial tenure positions consistent with having a zero cash flow first year balance sheet. For example, a change in the inflation rate from 6 to 12 percent increases the debt service on an acre of land for the typical southwest Oklahoma farm from \$101 to \$159. More equity or other farm earning would be required to offset this \$58 additional per acre expense. Inflation rates and interest rates are assumed to be constant throughout the 30-year assumed life cycle of the farm enterprise.

### Model Changes

The model used by Eginton was the basis for the research, however changes were made to make the model stochastic and to observe the impact of risk. The main changes programmed into the model include ability to specify a coefficient of variation on net farm income, an equity-asset ratio to limit borrowing on equity, income tax averaging, and making the model iterative to get statistically sound results on the key variables.

#### Coefficient of Variation

The coefficient of variation of income plays a key role in this research. Alternative coefficient values are used in the model to measure the impact on economic outcomes of various degrees of instability.

The coefficient of variation is applied directly to farm income, which is income from farm sources only and not from off-farm sources. A random number generator is used in the model with the numbers picked being limited from -1.96 to 1.96 from a mean of zero. This allows for 95 percent of all observations to be available for computations. These numbers are assumed to be from a normal distribution, however other distributions might give better results for this evaluation. This is an area for future research affecting farm incomes. The random number that is generated is then multiplied by the coefficient of variation. The calculations then affect farm income in the following manner, where FINC is the year-end calculation for net farm income and FINC' is the net farm income with the instability



factor applied to it. This FINC' value is then used as the starting dollar value of farm income in the next year's beginning balance sheet.

$$\text{FINC}' = \text{FINC} + (\text{COEF} * \text{RANDOM} * \text{FINC})$$

where

FINC = Farm Income

COEF = Coefficient of Variation

RANDOM = Random number generator value.

An example of the above equation, suppose the year-end calculation for farm income is \$48,000, the random number generated is -1.2, and the coefficient of variation is .25. The resulting farm income based on the coefficient of variation is \$33,600. This farm income value is then added to the off-farm income to get total farm income for the year. This \$33,600 value plus off-farm income is used as the income basis for beginning the next year's simulation instead of the sum of \$48,000 and off-farm income. The calculations continue in this manner every year for the 30-year period in the model to represent the typical growth-oriented family farm owner-operator.

#### Equity/Asset Ratio

Another major change introduced into Eginton's model was provision for the farmer to "mine" his equity. The original model always had a positive cash flow at year end. With random income, cash flow is sometimes negative but can be handled by borrowing. In negative cash flow years, the farmer will borrow from his equity to raise net cash flow to zero. The farmer is liquidating his assets to pay for his cash flow shortfall. The minimum equity/asset ratio sets

the upper limit the farmer can borrow. When the farmer reaches his borrowing capacity, he is then declared bankrupt and his farming operation is terminated.

### Income Averaging

With the stochastic model, the farm may have positive or negative incomes depending on the selection of the random number. Yearly fluctuations in actual farm incomes are simulated. All the tax policies in the basic model remain intact for analysis, but the calculated changes involved income averaging for tax liabilities.

According to the U.S. Master Tax Guide (1982), a taxpayer having unusual fluctuations in income can use an averaging device to ease the tax bite in peak income years. Rules of income averaging apply to almost all types of income including salaries, commissions, bonuses, interest, dividends, professional fees, ordinary income from sole proprietorships or partnerships, capital gains, wagering income, and income from gifts or inheritances.

To calculate tax liabilities with income averaging one must first calculate the "averagable income." This is the excess of the current year's taxable income over 120% of the average taxable income for the four years preceding the current year, which is called the "average base period income." The averagable income is the amount subject to averaging, as long as it exceeds \$3,000.

The next step involves computing a tax on 1/5 of the averagable income. This is equal to the difference between (1) a tax computed on the sum of 120% of the average base period income and 1/5 of the

averagable income, and (2) a tax figured on just the 120% of the average base period income.

The total tax liability under income averaging is the sum of the tax on 120% of the average base period income and five times the tax on 1/5 of the averagable income as calculated above.

Example: A married couple filing joint returns average annual taxable income during 1978-1981 was \$19,700. Their income consisted solely of salary in those years. As a result of winning a state lottery their taxable income for 1982 was \$57,500. Their averagable income is \$33,860:

Taxable income for 1982	\$57,500
120% of \$19,700 average base period income	<u>23,640</u>
Averagable income	<u>\$33,860</u>

The tax on 1/5 of the averagable income (\$6,772) is \$1,946:

Tax on \$30,412 (120% of \$19,700 plus 1/5 of \$33,860)	\$5,743
Less tax on \$23,640 (120% of \$19,700)	<u>3,797</u>
Tax on 1/5 of averagable	<u>\$1,946</u>

The tax under the averaging rules is \$13,527:

Tax on \$23,640 (120% of \$19,700)	\$ 3,797
Tax on averagable income (5 X \$1,946)	<u>9,730</u>
Tax liability	<u>\$13,527</u>

Note: Taxes calculated from 1982 schedule (U.S. Master Tax Guide).

The tax saved by averaging is \$3,078, the difference between the \$16,605 tax on \$57,500 without averaging and the \$13,527 tax with averaging.

The income tax averaging law allows the farmer to soften the tax burden associated with a year of unusually high income whether from good management or luck.

### Iterations

To determine the mean and variance of outcomes for different coefficients of variations on farm income and borrowing limits based on differing equity/asset ratios, the model had to be iterative. On each run with the given parameter values assigned, the model runs through the 30 year planning horizon 100 times. This appeared to be sufficient iterations to allow reasonably reliable statistical measures of outcomes for the variables to be analyzed in the study.

## CHAPTER III

### THE MODEL FOR EVALUATING FEDERAL POLICIES AFFECTING FARM GROWTH IN A STOCHASTIC ENVIRONMENT

The deterministic computer simulation model used by Eginton calculates annual income and expense streams and a yearly financial balance sheet for each of the 30 years in the planning horizon. The balance sheet contains information on cash flow, tax payments, family consumption and savings, and measures of firm size and rates of growth.

The model results provide a basis for estimating the impacts of selected federal policies. Impacts can be judged by comparing runs with and without a specific tax provision, different coefficients of variation, different borrowing level constraints, and various assumed inflation levels.

With the exception of the major changes mentioned in the previous chapter, the basic workings and computations of the model are the same as those used by Eginton. The results of the expanded model allow for a more vigorous and intensive analysis of the effects of federal policies on farm income, growth, and survivability. It allows analysis of results generated in a stochastic environment.

The farm firms are allowed to expand only in years when they generate greater income than expenses. Once the decision is made directing profits to either consumption or savings and investment, the

feasibility of expansion can be analyzed. Cash flow analysis provides the information needed to determine the feasibility of expansion by taking the operating income and expense streams and calculating the residual cash surplus or deficit. Farmers with positive cash flows are poised for growth, and farmers with cash deficits must mine their equity or liquidate their owned assets.

Income and expense streams of actual firms are subject to fluctuations caused by exogenous factors such as weather, domestic demand, and export demand. The coefficient of variation is used to simulate the fluctuations in income based on historical data. Simplifying assumptions project constant average rates of return from which costs can be deducted to determine net cash flow. This cash flow can be expected to increase or decrease in subsequent years, according to the variation in income and subject to imputed variation in mortgage and other costs over time. As such, this cash flow approximates the funds available to the firm for increasing consumption or savings -- investment. It also gives the amount of money available each year from the existing operation to finance expansion. The use of cash flow to service new mortgages provides the basis for growth in owned acres.

The system of equations that form the basic model are as follows:

Total income = Net income from land ownership  
 + Family labor earnings  
 + Operator management return  
 + Machinery equity return

Taxable Income Equation:

Total taxable income = Total income  
 - Personal exemptions  
 - Depreciation allowances  
 - Interest payment write-offs

## Cash-Flow Equation:

$$\begin{aligned} \text{Annual cash flow} &= \text{Total income} \\ &- (\text{Income tax} - \text{Tax credits}) \\ &- \text{Self-employment tax} \\ &- \text{Current living expense} \\ &- \text{Total mortgage payments} \end{aligned}$$

## Net Worth Equation:

$$\begin{aligned} \text{Net worth} &= \text{Current value of land holding} \\ &+ \text{Value of machinery complement} \\ &+ \text{Cash savings} \\ &- \text{Mortgages} \\ &- \text{Machinery debt} \end{aligned}$$

## Borrowing Equation:

$$\begin{aligned} \text{Borrowing power} &= \text{Cash-flow surplus} \\ &\times \text{Present value factor} \end{aligned}$$

## Minimum Living Equation:

$$\begin{aligned} \text{Minimum living expense} &= \text{Urban median income} \\ &\times \text{Rural savings rate adjustment} \end{aligned}$$

## The variable calculations are as follows:

$$\text{Income from land equity} = 4 \text{ percent of current value}$$

$$\begin{aligned} \text{Labor returns} &= \text{On-farm labor at farm wage rate} \\ &+ \text{Off-farm wages on surplus time} \end{aligned}$$

$$\text{Operator management return} = 7 \text{ percent of value added}$$

$$\begin{aligned} \text{Machinery return} &= \text{Value of machinery equity} \\ &\times \text{Opportunity cost factor} \end{aligned}$$

$$\text{Depreciation allowance} = 6 \text{ percent of machinery value}$$

$$\begin{aligned} \text{Interest write-offs} &= \text{Mortgages} \\ &\times \text{Interest rate} \end{aligned}$$

$$\begin{aligned} \text{Self-employment tax} &= \text{Net farm income} \\ &\times \text{Self-employment tax rates} \end{aligned}$$

$$\begin{aligned} \text{Current living expense} &= \$12,600 \\ &\times \text{Inflation factor} \end{aligned}$$

$$\begin{aligned} \text{Total mortgage payments} &= \text{Total mortgages} \\ &\times \text{Present value factor} \end{aligned}$$

$$\begin{aligned} \text{Hired labor expense} &= \text{Hours used} \\ &\times \text{Farm wage rate} \end{aligned}$$

#### Assumptions

The research presumes that cash flow is a useful measure of a family farm firm's ability to survive and grow. Cash-flow criteria guide the decision-making process adopted by expansion-minded farmers. To allow for consistency and comparability of results among the different experiments, the model assumes farmers expand using financially leveraged purchases to maintain a near zero annual cash flow without refinancing.

In case of negative cash flow, the farm firm must "mine" its equity. This "mining" of equity is in effect a liquidation of owned assets. This amount of borrowing on equity is limited by the equity/asset ratio in the model. In the years that the farm firm has negative cash flows, the model will reduce the value of the fully owned equity of the farm to raise the cash flow value to zero. Cash flow surpluses provide for expansion of real estate. According to Barry, Hopkin, and Baker a typical lender rule of thumb for real estate requires a one-third equity in purchased land. This requirement implies a maximum debt-to-equity ratio of two and an equity-asset ratio of .33. For purposes of evaluating the borrowing limits in the model, the equity-asset ratio's used are: 0.00, 0.20, and 0.40.

A second set of assumptions deals with income and expense streams. Based on historical data and economic theory, the owner-operator is awarded a net expense (after production expense)



real net return of 4 percent on the current value of land. The labor-management income is calculated by adding labor return (farm wage rate times labor requirements) to management return (7 percent of net cash receipts). Net cash receipts are the value of all agricultural output less operating input costs. Debt financed machinery investments are assumed to break-even financially through output increases, labor savings, and timeliness benefits. Machinery equity, based on an opportunity return, contributes to the dollar value of income.

The 30-year planning horizon, as stated before, is assumed to be the typical term of active growth oriented ownership for the owner-operator of a typical family farm. The operator is assumed to begin full-time farming at 35 years of age. This age positions him with maturity, experience, and capital to operate an economic farming unit.

#### Initial Farm Parameters

The land value for the typical family farm was derived from the Firm Enterprise Data System. The value of land-based improvements such as fences, barns, terraces, and drainage are added to the unimproved land value to approximate the market price of an average acre of land.

The amount of owned, mortgaged, and rented acres was determined from the cash flows reported for the FEDs typical family farm. Based upon the various starting positions of full owner, zero cash flow part owner, and full renter, the ownership patterns of these economic size units are changed. The full owner starts with only fully owned acres,

i.e., no mortgaged and no rented acres. The part owner and renter purchase currently rented acres (as cash flow allows) before purchasing land for expansion beyond the initial operation. After the entire economic size unit is under full ownership, growth beyond the typical size results from expansion purchases rather than renting.

The value of the machinery required by the beginning typical size family farm unit is taken directly from the FEDs machinery accounting data for the typical farm. The first year depreciation allowance is the same for each of the three tenure experiments. The labor requirements are taken from the typical farm data and are entered into the model as hours of labor required per acre operated. The typical family farm has four members providing a maximum of 2,600 hours of labor annually. The model allows for farms with requirements of less than 2,600 hours to receive off-farm employment at an hourly wage rate of \$7.50. This allows for the full utilization of available family labor. On the other hand, when labor requirements surpass the available family hours of labor, additional labor is hired. After the twentieth year of the simulation, the family's annual labor resources decline to 2,000 hours, based on the assumption the two children are no longer available for farm labor. All farm labor is paid the farm labor wage rate reported by the USDA for the state in which the farm is located. The initial farm parameters in the model are as follows:

- Land value
- Number of acres operated
- Number of acres owned with full equity
- Number of acres owned with mortgages
- Number of acres rented
- Capital gain rate on land
- Value of machinery required for units
- Value of machinery owned
- Valued of machinery under loan

Depreciation rate on machinery  
Minimum size land tract for expansion.

#### Exogenous Economic Parameters

The exogenous parameters that affect the results of the model include:

General inflation  
Coefficient of variation on farm income  
Equity/asset ratio for borrowing limits  
Machinery inflation  
Interest on machinery loans  
Interest on savings  
Returns to equity  
Returns to rental land by value of net receipts  
Leverage rate for savings  
Capital gains use rate  
Mortgage rate for land.

Two interest rates of 6 and 12 percent are used to show the effects of continued high and intermediate rates of inflation on survivability and growth in size and net worth. This allows for the analysis of the impact of federal policies affecting the general price level on typical family farms. Interest charged on purchases and paid on savings are a real rate of 3 percent. The nominal rate is the inflation rate plus 3 percentage points.

The values of the coefficient of variation used in income in the simulations are .25, .50, and .75. These values and their appropriate calculations attempt to simulate variations in yearly farm income based on prices, yields, weather, supply and demand factors, etc. Based on results of 11 farms covering the years from 1972-1981 from OSU Farm Record System, the average coefficient of variation on net farm income in southwest Oklahoma is 94 percent. Data for individual farms are presented in Table 1 of the Appendix. (Note: all tables in

the study are located in the Appendix.) Regressing the coefficients of variation on the percentage of owned equity and inserting the equity value of 100 percent into the equation, a coefficient of variation of 38 percent is predicted for the full owner. Individual coefficients of variation in Table 1 of the Appendix may seem low compared to the values used in the model. However, the years from which the data are taken do not appear to be typical. During the years 1972-1981 the economy experienced unusual supply and demand shocks and higher than normal inflation trends. Farmers' incomes were greatly influenced by rising production input costs including land, machinery, equipment, fertilizer, and etc. In the first part of the series of years, the U.S. experienced huge exports and thus higher prices. During these years, farmers were also affected by such events as low farm stocks worldwide, a grain embargo, and cutbacks in oil and oil related products. In the later years of the period considered, inflation continued to increase, farm commodity stocks worldwide continued to mount with consecutive years of favorable weather, and another grain embargo was invoked. Although the individual farm records for Southwest Oklahoma do not go back before 1972, secondary data sources indicate considerably lower variation in incomes in the 1950s and 1960s -- in no small part because of government commodity programs to stabilize returns (Tweeten 1981b). Since the model is a simulation of future years which may behave more like the 1960s than the 1970s, the overall lower values of the coefficient of variation seem to be warranted. However, it is possible to "experiment" with higher coefficients if so desired.

The federal tax schedules used within the model to determine income tax liabilities are based on 1982 tax rates. The method for calculating taxable income change with the various tax experiments. Self-employment tax limits are indexed to general inflation rates and the tax liability is calculated using the current projections.

#### Income Tax Indexing

In the standard case with indexed income tax rates, the taxable income is deflated to constant dollar terms and the tax liability is determined from the tax rate tables. The tax is then inflated to current dollars for the year of the simulation. At this point, investment tax credits for the firm are calculated as 10 percent of the year's depreciation which on the average amounts to 6 percent of the current value of the machinery complement.

#### Family Living Expenses

The living expense for the farm family in the model was set based on the median family income of urban families in 1979 as shown by the minimum living equation previously mentioned. Farm families' savings rate are near 30 percent of their incomes compared to a 5 percent savings rate of urban families. This difference in consumption/savings patterns provides a basis for adjusting the minimum living standard to 70 percent of the median urban income. The farmer is assumed to invest the entire income differential in his farm. This amounts to farm family spending (consuming) \$12,600 per year when the income for a median urban family is \$19,000. The current living expense is then calculated by taking \$12,600 times an

inflation factor. This allows for constant real value of consumption each year. An alternative consumption function allowing living expenses to change with personal income was also part of the experiment.

#### Other Calculations of Accounting Year

At the beginning of the simulation, the model calculates the current values of the imputed variables and determine the income and expense streams for the accounting year to produce a financial balance sheet for the farm on January 1. The current land and machinery complement values are calculated by multiplying their original values by the inflation factor of  $1 + \text{inflation rate}$  raised to the power,  $N-1$ , where  $N$  is the year of the simulation. The resulting data are used to determine the current values of the land equity and the farming unit as a whole.

The income streams are all calculated in current dollars. For tax computations the annual mortgage payments are split into principal and interest components. The current maximum taxable self-employed income is calculated by inflating the 1979 ceiling of 17,700 to current dollars. An indexed allowance for personal exemptions is deducted from taxable income. New accelerated depreciation schedules were not considered to simplify programming. From the results on the balance sheet, annual cash flow is calculated in the following manner: total income - total expenses - (federal income tax - investment tax credit). The cash flow value shows the ability of the farm firm to service additional mortgages, and as such is used as the basis for expansion in minimum size increments of 40 acres.

## CHAPTER IV

### RESULTS AND INTERPRETATIONS OF THE SIMULATION MODEL

This chapter reports the implications of the federal fiscal-monetary policies for a typical Oklahoma commercial family farm in a stochastic environment. Results are tabulated in the Appendix Tables 3 through 38. The data provide estimates of rates of growth in discounted net worth, numbers of surviving farm firms, and tax payment information under alternative ownership patterns, varying levels of uncertainty and borrowing limits, and various selected federal income tax features. This stochastic model also provides a basis for many fruitful areas of future research and analysis.

The data were used to analyze interactions among inflation, taxation policies and farm characteristics as well as to determine the separate effects of differing tax provisions and rates of inflation on growth and survivability of the farm. All of this is within the framework of differing levels of uncertainty directly affecting farm income and varying limits of borrowing on one's equity to meet obligations of negative cash flow years. The three general experiments or alternatives to the basic computation relate to (a) initial tenure, (b) family consumption level, and (c) tax policy. Each of these experiments was run with two rates of inflation, 6 and 12 percent. Each experiment was also run with three coefficients of variation, 0.25, 0.50, and 0.75, which directly affect farm income.

And finally each experiment was run with three equity/asset ratios, 0.0, 0.20, and 0.40, which limit the farm operator's "mining" of his equity to meet liabilities in deficit cash flow years' liabilities. A total of 486 30-year simulations were run with each of the runs consisting of 100 iterations. The results shown for each variable are averages of the 100 iterations, and all numbers are from normal distributions. It is important to note that the results of the runs are the average values of the iterations of firms that survived the 30 year period. For example, if 25 of the 100 iterations go bankrupt, then the results shown are only the averages of the 75 iterations that completed the 30-year simulation. This will tend to bias the results of the balance sheet variables presented in the tables. The larger the number of failures the more biased the results are because the "bad" farm's values are not included in the averages. On each of the runs the first and thirtieth years data were reported and analyzed. The data were tabulated and reported in the Appendix showing starting values and increases over the 30-year simulation defined by rows for each of the nine experiments. Eight balance sheet variables are reported by the columns.

The total number of bankruptcies for the runs are also tabulated in the appendix. These tables have the nine experiments reported in the rows of the tables with their corresponding number of bankruptcies represented by the columns. For analysis, the bankruptcies numbers are split into three periods, (1) years 1-10, (2) years 22-20, and (3) years 21-30 with the "total" column at the right side of the table. This procedure shows the most difficult period for farmers to survive financially given the stochastic environment of the model.



### Basic Comparison

The basic comparison model simulates 30 years of operation of a typical family farm under the tax laws in effect in 1981. The tax laws include available tax advantages such as depreciation allowances, interest payment write-offs, and investment tax credits. The tax tables are indexed throughout the simulation, and self-employment taxes are calculated using current projections in rates and with earning ceilings indexed to inflation. Consumption is assumed to remain at \$12,600 in constant dollars. This provides a basis for comparing the increases of the balance sheet variables with all of the other experiments. The assumptions are favorable for savings and investment and thus the largest rates of growth and asset accumulations are expected in this compared to other experiments.

### Constant Dollar Values

All of the financial results are reported and tabulated in constant 1979 dollars. This allows for simple comparisons among values derived with different inflation rates. Constant dollars place all values on a common basis so the beginning and ending data and real rates of growth can be evaluated.

### Initial Tenure Experiment

The "initial tenure" experiment tests the impact of different starting positions on the rates of growth in discounted net worth for typical family farms. Different initial ownership positions affect growth rates in discounted net worth and appear to be correlated with

the degree of initial leverage. The greatest rate of increase in net worth is in the initial full renter, primarily because of the low base value from which the growth rates are calculated. Both the initial full renters and the zero cash flow part-owners under the basic assumptions were able to expand land ownership within the 30-year growth horizon. The rate of increase was slowed by increasing the uncertainty, i.e. as the coefficient of income variation increased the amount of full-owned equity acres stopped increasing and even declined in the case of the zero-cash flow tenureship. Even though fully owned acres slowed and declined with increasing uncertainty, the mortgaged acres continued to increase but at a decreasing rate. The full renter consistently remained in the lower tax brackets, but as with the full owner and zero-cash flow situation the percentage of taxes paid per dollar of income increased as the coefficient of variation increased. The full owner's growth was restricted by higher tax brackets and the higher need to mine equity in cash deficit years. The greater absolute increase in acres for the full owner supports the view that the established owner-operator is in a position to outbid competitors for land. This is especially true in the first half of the 30-year simulation, where the full owner rapidly expands net worth. However, in the second 15 years of the simulation the full owner grows slower due to higher payments on land, mortgages, and taxes. In later years, higher proportion of mortgage payments are non-deductible principal payment rather than deductible interest payments. This causes the rate of net worth growth to be less than for the zero-cash flow and full renter in some cases. On the other side of the coin, the zero-cash flow and full renter grow slowly in the first half of the

simulation but more rapidly in the second half because they have built up their income, savings and equity to allow for a more rapid expansion without the large mortgage principal payments associated with the full owner.

#### Alternative Consumption Experiment

The alternative consumption experiment changes the baseline case (constant minimum consumption levels regardless of income) to allow consumption to increase with income. This consumption function allocates 70 percent of the cash flow surplus for family living expenses beyond the \$12,600 minimum level. The implied marginal savings rate out of personal income is 30 percent. The increased consumption reduced investment and yearly cash flows, limiting the owner-operator's financial ability to service additional mortgages and firm expansion. This experiment had the greatest effect on firm growth among all experiments except non-indexing of taxes. In most cases the low-equity farms did not increase beyond the initial total acres operated, although they did increase full-equity acreage and mortgage acres. Thus they grew carefully, gaining full equity in more acres but not to the point where they were forced to mine equity to meet cash deficit years. These results held true for all levels of uncertainty tested. However, with higher coefficients of variation and equity/asset ratios, the number of farm failures increased.

### Income Averaging for Tax Liabilities

The numbers in Tables 3 through 20 of the Appendix for the taxes paid are average values for the 100 iterations as stated previously. The tax liabilities are calculated by using income averaging, where taxable incomes of the four previous years are averaged and used along with the taxable income of the current year to account for total taxable income. The results show that as instability increases the tax liability for the farmer increases. Assuming a normal distribution of random numbers generated to adjust the coefficient of variation which in turn influences the farmer's income, there will be as many favorable years as unfavorable years. So with increased instability the taxes paid are higher, because it takes four consecutive years of negative cash flows for the average income plus a bad fifth year to pull tax liability to zero. By the same reasoning, with high instability when a good year is generated, the end result is a higher income than would have resulted with a lower coefficient of variation. So, with income averaging the tax liabilities are less than the value that would be owed if the high income year was used alone to generate taxes for that particular year. Another explanation centers around the fact that income taxes are progressive, so after tax income if graphed would show a line increasing at a decreasing rate. Any straight line drawn between two points on the curve would show the amount of after tax income with complete stability and the difference vertically between the curved line and the straight account for the higher taxes paid with uncertainty. This

analysis of the effects of uncertainty is explained by Tweeten (1979, pp. 209-13).

#### Alternative Tax Policy Experiment

The four tax policy alternatives illustrate the importance of various tax concessions to farm growth. All available tax advantages in 1981 were used in the baseline case, and then each simulation thereafter had one tax advantage deleted. As shown in Tables 3 through 20 of the Appendix, capital improvement-intensive farms respond more to depreciation and investment tax credits, while land-oriented farms derive relatively more benefits from interest payment write-offs. The interest payment write-offs were extremely important for all farmers with expansion opportunities. The largest effect on all farm scenarios resulted from non-indexed income tax rates as apparent in the number of farm failures. The frequency of bankruptcies increased with higher values of the inflation rate, the coefficient of variation, and equity/asset ratios. Non-indexing places farmers in high tax brackets, reducing their ability to meet financial obligations. Removing any of the existing tax advantages would increase the tax liabilities of the farmers. Interest payment deductions appear to encourage expansion in acreage, while depreciation allowances and investment tax credits encourage the substitution of purchased capital such as machinery for other inputs.

#### Net Worth Analysis

Net worth is the difference between the current value of total assets and total liabilities. It is an indicator of accumulated

buying power, financial progress and the ability to control assets. The beginning net worth values and the increases of the 30-year simulation are reported in the tables containing the balance sheet variables in the Appendix. The compound annual percentage rate of increase in discounted net worth is reported in parentheses in the same tables. The highest growth rates were achieved by the farms with small initial equity and labor requirements.

The net worth increases analyzed among the various experiments were affected by the rate of inflation and initial ownership. With a 6 percent rate of inflation the growth in net worth increased as the coefficient of variation increased. This held true for all three of the initial ownership situations. The pattern of the growth rates in net worth among the different ownership scenarios did not hold at the 12 percent level of inflation. The full owner's rate of net worth growth decreased with each increase in income instability but the differences in growth were too small among coefficients of variation to be of concern. The remaining two initial ownership patterns resulted in increasing growth rates with increasing instability as they did with the 6 percent level of inflation.

The rate of inflation seems to interact with the various experiments to affect the accumulation of net worth. With a 6 percent inflation rate, the full owner's accumulation of equity was truncated most severely by the non-indexing of taxes. This led to several negative growth rates over the full 30 years, however the period from years 1-15 saw growth in the 3.0-3.5 percent range. The negative growth years occurred in the latter half of the 30-year period.

The next greatest impact for the 6 percent inflation full owner was from the interest write-off runs, followed closely by the higher consumption runs. The difference between the two was small, however.

With the zero-cash flow and the full renter at 6 percent inflation, the dominant experiment affecting net worth growth was the higher consumption. These low equity farmers have lower returns to land, labor, and management than the full owners. These "high-living" farmers are using 70 percent of their cash flow surplus on living expenses. So, with lower incomes this leaves few dollars for expansion in 40-acre units.

Major impacts at 12 percent inflation occurred for all initial tenureships with non-indexing of taxes. Non-indexing of taxes caused rapid mining of equity which led to many failures. The higher consumption runs proved to be the next most severe in slowing net worth accumulation. Once again with the full ownership case the interest write-off has large impacts on net worth growth.

The least restricting scenarios were (a) write-offs limited to one million dollars, (b) write-offs truncated by wealth (less than \$500,000 in net worth), and (c) write-offs truncated by income (less than \$36,000 in personal income). These rates of growth with all combinations of ownership, inflation, instability, and borrowing capacity were for all intensive purposes equivalent to the baseline case. Although some growth rates were slightly higher and some slightly lower, on the average all were close to the baseline comparison. These slight fluctuations are mainly due to luck of the draw of the random number generator.

### Effects of Coefficient of Variation

The coefficient of variation, a value used to measure the instability in farmers' income, plays a very important part in this research. This value attempts to simulate the effects of drought, flood, supply, demand, government policies, and all other exogenous variables that directly or indirectly effect the farmer's personal income. Although the model allows for the sensitivity analysis of all scenarios, to accommodate limitations on time and space, a simple examination follows the interaction of the coefficient of variation with inflation, tax experiments and numbers of farm failures.

### Interaction of Coefficient of Variation and Inflation

Inflation greatly influence the starting positions available to entry-level farmers faced with debt financing. Inflation increases borrowing expenses through higher interest rates and creates cash flow barriers to acquiring ownership of assets.

The initial equity and farm size of the zero cash flow farmer show the impact on farm tenureship patterns resulting from an increase in inflation. The initial tenure positions were determined from the cash flow equation. The results show the maximum number of acres to which the operator can obtain title. Initial equity requirements vary with size of ownership. The zero cash flow initial position with 6 percent inflation is 55 fully owned acres and 128 mortgaged acres while at 12 percent inflation the numbers are 16 full-owned acres and 38 mortgaged acres. The remaining acres in the economic unit are rented. The full owner's and full renter's initial land ownership



rented. The full owner's and full renter's initial land ownership patterns are set by definition and thus are not altered by the inflation rates. The higher borrowing expenses associated with the 12 percent rate severely limits the mortgage that can be carried by the income on a 960 acre farm. For comparability, a 30 percent minimum equity is specified for all ownership situations.

The inflation rate coupled with the level of instability affected the different experiments by the level of impact with the various ownership patterns. With the full-owner arrangement the non-indexing of taxes had a major impact on slowing wealth accumulation at 6 and 12 percent inflation and all levels of instability. The next two severest impacts for the full owner were the interest write-off and the high consumption experiments. The 6 percent inflation for all levels of the coefficient of variation showed the interest write-off as having the second greatest impact on growth, followed by the higher consumption scenario. At the 12 percent level of inflation the higher consumption test affects net worth more than the interest write-offs. The overall growth rates for the full owner basic comparison were not much affected by the inflation rate, however as instability increased the growth in net worth slightly declined. This can be explained by the timing of the principal payments on expansion acres. The full owners expand rapidly in early years, and thus pay just the interest on land payments, this is where the impact of interest write-offs affects wealth accumulation. Then in the latter years of the 30-year scenario the large sums of principal payments have to be made from returns. So, with higher variability of income the bad years hit the

farmer hard financially causing him to mine his equity, thus arriving at the slightly lower overall growths in net worth.

The experiment having the greatest affect on the full owner, affects the wealth accumulation of the zero cash flow and full renter ownership patterns to the greatest extent. However, the experiment with the major impact varies with inflation but remains consistent with increasing coefficients of variation. The high consumption experiment was the major experiment affecting the zero cash flow and full renter farmers, followed by the non-indexing experiment. This held true for all levels of instability. However, as with the full owner, the non-indexing of taxes had the greatest impact of all experiments at the 12 percent inflation level for the zero cash flow and full renter scenarios. The overall accumulation of equity was slowed by the increase in inflation for the part owner and full renter. The rate of growth however, at both inflation rates, increased as the coefficient of variation increased. Low equity farmers are not able to grow as fast because of lower returns, however at high levels of instability they are poised to invest more in good years and take the risk of having to liquidate in bad years.

Inflation increases the cost of controlling an economic farming unit to the point where a full-time owner-operator must be a relatively high wealth individual to enter and survive in the farm economy. For highly leveraged farmers, cash flow available in the early years limits the farmer's ability to service mortgages and thus the potential for ownership of a farming unit.

### Type of Ownership Acquired

The accumulation of equity whether in the early or late years is apparent in land purchases. The data show a definite pattern for the end results of the land holdings at the end of the 30-year period. For all tenureship patterns, levels of instability and rates of inflation the increases and decreases in total operated acres, full equity acres, and mortgaged acres are consistent. At the 6 percent inflation rate the highest increases or decreases in land results were in the categories of total operated acres and mortgaged acres. At the 12 percent inflation the greatest increases or decreases in land holdings when compared to the 6 percent rate fall in the fully owned acres category.

The full owners increased total acres operated under all instability conditions. However, with higher instability the number of fully owned acres declined as farmers were forced to mine their equity to meet expense obligations. The same pattern basically held for the part owner and full renter. However, the increase in total acres operated was very small compared to the full owner situation. At higher levels of instability the total acres operated sometimes never increased. The overall analysis indicates that at 6 percent inflation the full owner firms grew fairly rapidly in the early years but were forced to liquidate or mine their equity to meet later years' principal payments. This accounts for the 6 percent inflation scenarios having the greater increases in total operated and mortgaged acres but less of an increase in fully owned acres when compared to the 12 percent scenario.

The same logic holds for the zero cash flow and full renter situations. The 6 percent inflation allows rapid growth early but usually results in the mining away of the acquired equity in later years. The 12 percent inflation rate allows the farmer to acquire more fully owned acres. These acquired acres decline from full owner to full renter, but their values are important for zero cash flow part owners and full renters. The total number of acres acquired in all categories declines as instability increases. The key point here is at 12 percent inflation the part owner and full renter are able to acquire land at a rate so as to increase fully owned acres and mortgaged acres without increasing total farm size, so the farmer is becoming an established farm striving toward full ownership. Based upon the assumptions and the workings of the model, this result is a biased depiction of the real world.

Interaction of Coefficient of Variation  
and Tax Experiments

The full owner faces reduced growth in the experiment run without tax indexing. Under 12 percent rather than 6 percent inflation the rate of growth in discounted net worth declined drastically causing all 12 percent non-indexing runs to fail for all situations. For the full owner situations across all tax experiments with all levels of instability there was not a large difference between the growth rates at 6 percent as compared to 12 percent, except in the tax indexing experiment. As instability increased the non-indexing of taxes increasingly restricted growth in equity. With the increase of

inflation to 12 percent farmers were forced to pay higher taxes to the point of causing massive failures.

As with the full owner, for the zero cash flow and full renter farming situations the non-indexing test was the most restrictive especially at 12 percent inflation compared to 6 percent. With the zero cash flow scenario at the .25 and .50 coefficients of variation the tax experiments were all more restrictive to wealth accumulation at 12 percent inflation, except for the interest write-off experiment which was less restrictive. This resulted from interest write-offs on early years expanded mortgage payments. The .75 coefficient of variation shows that all tests were more restrictive at 6 percent than 12 percent inflation except for the high consumption experiment. This latter result is possibly an anomaly caused by many farm failures at this rate of instability, leaving the reported data as averages of the few iterations that completed the 30-year period.

The full renter situation is restricted most by inflation for all tax experiments and for all levels of instability. In almost every case the full renter was able to expand total operated acres. The main exception was with 12 percent inflation and low levels of instability. The full renter was able however to obtain full equity ownership of some acres in debted ownership of close to 40 percent of the total acres. The growth in total farm size, equity acres, and mortgaged acres was generally lower with the high consumption and no depreciation allowance experiment. The depreciation allowance plays a greater role for the full renter due to the large proportion of assets in machinery. The depreciation tax benefit has less impact on the expansion of the land-dominated farms; however, the mechanized,

capital-intensive farms showed steady growth due to the depreciation allowance.

### Rates of Taxation

One important policy issue is the effect of the tax policies on the structure of agriculture. The data presented in Table 2 of the Appendix show the rate of taxation as measured by taxes as percent of personal income and as a percent of net worth. The numbers represented in year 1 and year 30 are average percentages from the 100 iterations.

In the case of .25 coefficient of variation, the tax rates for year 30 are lower than the rates for the initial year. The full owner is taxed at a rate of 20 percent of income while the zero cash flow and full renter farmers are taxed at a rate of 5 percent. The lower tax rate in year 30 shows the effects of the tax benefits.

The .50 compared to the .25 coefficient of variation causes tax rates to increase. All tax rates increase and the smallest increase is for the full owner situation -- a 31.5 percent increase in tax rates. The zero cash flow part owner's and full renter's respective tax rates increased by 189 and 325 percent. Increases also occurred in taxes as percentage of net worth, with the full owner increase being the lowest and full renter the highest in percentage rate.

The results with high instability (.75 coefficient of variation) show the actual tax rates increasing over and above the .50 coefficient level. The year 30 average tax rates for the full owner, zero cash flow, and full renter are 41.81 percent, 25.3 percent and 32.2 percent, respectively. The full owner's increase over the .50

variation level was 57.5 percent. This says for the full owner the resulting percentage increase between the levels of instability increased as instability increased. The opposite was true for the part-owner and full renter. The increase between the medium and highest level of instability was 145 percent for zero cash flow and 260 percent for the full renter. So, the average in tax rates between the various levels of instability increased at a decreasing rate. The results at the high level of instability could be biased by the same effect of the number of bankruptcies associated with the highly unstable scenarios. (The increasing tax rates over time under high coefficients of variation result in part because low income farmers become illiquid and exit farming. Because such operators are expected to exit farming, they are not included in the farm averages.)

The overall analysis would seem to point to the fact that even though the full owner is taxed at a rate higher than the other two ownership situations, he is still able (or forced) to take more advantage of tax policies as stability declines. The evaluation seems clear by looking at the highest instability level. The full owner is taxed at the highest rate, followed by the full renter, then the zero cash flow case. This seems to suggest that the zero cash flow operator over the 30-year period has acquired enough equity to allow him to make use of the tax advantages to a higher degree. The full owner even though facing the highest rate in the tax schedule is still receiving benefits from the tax credits and deductions. He has enough land and other equity that his income and returns are higher in good years, but with the income averaging his tax liability is lower than it would be without income averaging. The initial full renter has not

acquired sufficient income to make full use of the tax credits and deductions.

The above results suggest an area for future research. It may be possible to develop an optimal ownership pattern at various levels of instability to take maximum advantage of tax policies.

#### Farm Failures

Appendix Tables 21 through 38 show number of farm failures associated with the 100 iterations of each of the farm scenarios. The failures are reported in three time periods: (a) 1-10 years, (b) 11-20 years, and (c) 21-30 years. The fourth column gives the total number of bankruptcies out of 100. The rows consist of the three initial tenure situations, each followed by the nine experiments evaluated. The failures recorded on these tables are the farm situations that did not survive the 30 years because of random outcomes and the constraints placed on runs by the equity/asset ratios. None of the failures are figured into the averages of the balance sheet variables as previously reported.

By far the largest single factor affecting the number of failures was the non-indexing of taxes. The severity of this experiment was most pronounced at the 12 percent level of inflation. The 12 percent level had complete failure of all 100 iterations for each situation. Attention here lies with the time period in which the failures occurred. At the lowest level of instability and minimum equity/asset ratio of 0.0, all failures occurred in the last period (21-30 years). As the equity/asset ratio was increased to .20, a few of the bankruptcies began to appear in the second period (11-20 years), and



with the full renter 2 failures even occurred in the first period (1-10 years). The dominant failures area was the second period with the equity ratio raised to .40. As the coefficient of variability increases along with the equity ratio, the number of bankruptcies become largest in the first period. With the instability at a constant level, by raising the equity/asset ratio from 0.0 to .40 the failures begin to appear in the first period. The number of first period failures is inversely related to amount of fully owned equity, i.e. as ownership declines from full owner to full renter, the total bankruptcies in years 1 to 10 increase.

With low levels of instability no failures occurred from any source except the 12 percent tax indexing case until the full renter scenario at variability coefficient .25 and equity/asset ratio .20. In most cases the first period had the majority of the failures at 6 percent and 12 percent inflation. The total failures were few, somewhere around 5 to 12 percent of the 100 iterations. The high consumption and depreciation allowance experiments showed the lowest numbers of bankruptcies. This tends to support the previous findings that higher consumption farms grow less, thus avoiding financial trouble from high principal payments on expanded acreage in later years. The depreciation allowance results rely on the analyses previously mentioned that full renters have a high proportion of their equity in machinery.

At the .40 equity level, 6 percent inflation and non-indexing caused a large number of failures in the third time period. In the 12 percent inflation case the majority of failures was in the second period, with the remaining ones in the third period.

By increasing the coefficient of income variability to .50, bankruptcies were almost nonexistent at the 0.0 equity/asset level. The full renter experiment with higher consumption did however have 20 failures at 6 percent inflation and 25 at 12 percent inflation. Each of the runs had 15 of the failures in the third period, once again showing the importance of high principal payments in later years at higher coefficients of variation.

At the .50 coefficient of variation, the number of farm failures drastically increases for the part-owner and full renter as the equity/asset ratio required for solvency is raised to .20. The only failures occurring at either inflation rate for the full owner came without tax indexing. The zero cash flow situations at 6 and 12 percent inflation show bankruptcies of all runs at the 50 percent level. The major exception lies with the high consumption experiment which only had 6 failures. The 12 percent high consumption test showed 41 failures, which was the lowest. The low accumulation of equity under by this scenario divorces farmers high numbers of failures caused over expanding. By far the largest number of failures came in the first period, followed by the second, then the third period. The same is true for the full renter; however, the full renter definitely has more failures than the zero cash flow case. The 6 percent inflation runs have more total failures than the 12 percent runs with the full renter, with the zero-cash flow operator failures showing nearly the same failure rate at both levels of inflation. The full renter's failures were extremely large in the first period. This results from low-equity base farmers having low revenue generated to meet financial obligations. The model calculates income from returns on equity of

the owner-operator. So, a full renter starting from a 30 percent equity level in machinery is very susceptible to failure from a bad year with a borrowing capacity limited by the .20 equity/asset ratio. When the equity/asset ratio is raised to .40, the major change in the full owner came at 6 percent inflation. The 12 percent scenarios only had failures in the tax indexing experiment. The failures associated with the runs of 6 percent inflation were quite increased, so presumably there were several situations close to failure at the .20 equity/asset level. Approximately two-thirds of the failures occurred in the second time period because rapid expansion in early years left farms vulnerable to economic setbacks. The three experiments -- higher consumption, interest write-offs, and depreciation allowance -- were the slowest growing situations except indexing of taxes. In this case the farmers expanded rapidly in the early year causing massive mining of equity in later years which showed very low or even negative growth rate in years 15 through 30, thus leaving a small overall average growth for the full 30-year period.

The .75 coefficient of variation follows basically the same patterns as previously set forth. The main difference is that more failures occur at 6 percent inflation compared to 12 percent with the higher equity/asset ratios. This can be seen by looking at the total failures at .20 and .40 equity ratios. The results could be affected by the luck of the draw of good and bad years at these high levels of income variability along with the fact that many farms are on the verge of failure at any given level of borrowing capacity and with the next increase of the equity/asset ratio they fail.

### Impacts on Structure

The issue of structure in agriculture needs to be dealt with to see how various policies either purposely or inadvertently affects the whole of farming organization. Several questions arise. What have the policies researched herein influenced structure? How well do the assumptions square with reality? How does one deal with behavioral problems in the assumptions? How would different assumptions affect the results? These questions along with many others make research pertinent to arrive at accurate analysis of the various policies.

This study overstates the rate of farm failure in the real world for several reasons. The model does not include income from off-farm sources other than income from excess farm labor. One such source of off-farm income is royalty in oil and gas or other financial investments. Such income could cushion land payments in cash deficit years. A strong force that is behavioral in nature and would significantly affect the number of farm failures is in the borrowing of money or mining of equity to meet financial obligations. Perhaps assumptions different than those used in the model would more accurately simulate reality of this behavioral variable. The later years impact heavily on the farmers in the model trying to pay principal on expansion acres purchased earlier in the period without ability to deduct such payment from income taxes. In the "real" world the farmer usually will refinance loans to avoid heavy payments at the end. The mining of equity is in effect a refinancing method, however based upon the assumptions the "real" world is not fully simulated. The model's equity-mining procedure takes the dollar value from full

equity acres, which reduces full-equity acres. The acres are then classified as mortgaged acres. In reality if a farmer runs into cash flow difficulty he will liquidate his mortgaged acres where he can remain with his original fully owned acres.

The results are averages of the 100 iterations; however, when an iteration farm fails and does not reach year 30 its values are not used in the averages of the variables. This causes the average reported variables to be overstated, because with high numbers of failures only the lucky farms with higher incomes are reflected in the averages. The less favorable income and balance sheet results of failed farms are disregarded. To the extent such operators exit farming and successful operators take over their farming operations, results herein are realistic.

However, the basic problems of growth and survivability can be addressed from the results of the model. The failed farms make room for expansion of surviving farms. Only so much land currently is in agricultural production. So if policies make it easier to expand, then obviously not every farmer can expand his acres. If farm policies encourage growth of individual farms beyond the amount of land normally coming available because of death, retirement, or poor management practices, then some farmers must fail. The results of this paper clearly show that the full owner can acquire more total acres than the zero cash flow part owner or full renter. At the low levels of instability the part owner and full renter increase their fully owned acreages with little or no increase in total acres farmed. So the high-equity farmers clearly can buy up the available land faster than the other farm situations considered. This holds true for

all of the equity/asset ratios restrictions placed on mining of equity to meet cash deficit years. Results suggest that tax features encourage expansion of farms and lead to fewer and larger farms, especially in an unstable environment. Initial ownership is extremely important to growth and survivability of farmers. The more stable the prices, the better off the zero cash flow and full renter. But as instability and inflation increases they are less able to expand compared to the high-equity, high-income farmer. The full owner tends to bid the price of land up to the point where other farmers cannot afford to purchase additional acres.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

This study applies a model for evaluating selected federal policies as they affect the growth and survivability of typical Oklahoma family farms. The farm's growth and survivability under the various assumed levels of inflation, initial ownership, coefficients of variation, equity/asset ratios, and tax policies were evaluated using a stochastic computer simulation model and the results reported.

The coefficient of variation was applied to net income to reflect various rates of instability facing the farm firm. The equity/asset ratio was used as a measure of a farm's borrowing capacity. The farmer "mined" his equity within the constraints of the ratio to meet financial liabilities in cash deficit years. The specific tax policies examined in this research include tax credits on investments, deductions of interest expenses, indexation of tax rate schedules, and depreciation allowances.

The above situations were evaluated under two levels of inflation. Inflation is considered to be part of the policy environment and has been tied to the farmer's cash flow problem. Early periods of cash deficits decrease the ownership accessibility of land for low wealth entrants and marginal existing farmers. Those who survive become established farmers who in later periods of high cash surplus can outbid potential farmers and low-equity farmers for land.

The inflation rate did not have much of an effect on the rate of growth in net worth. However, higher inflation rates effectively restrict entrants into farming by raising land prices relative to income, creating cash flow problems and making it difficult for individuals to pay for land purchases out of income derived from the land.

With inflation induced increases in equity requirements and cash flow problems, farmers have had to develop new methods to get into farming and even continue in farming. Some of the methods most used to cope with inflated land prices and higher mortgage rates include external financing, off-farm employment, and land rental to gain control of an economic-sized farming unit.

The termination of favorable tax treatments would be catastrophic to a financially weak owner who purchased land with expectations of continuing tax benefits. The non-indexing of taxes had extreme implications to all farm ownership situations. The next largest benefit was the interest write-off for the full owner and to a lesser extent for the zero cash flow part owner. The full renter was greatly affected by the depreciation allowances because of the high proportion of machinery in his total assets. These benefits tend to leverage farm land purchases, thus accelerating the trend toward fewer and larger farms. Higher growth rates permitted by utilization of income tax provisions increase competition for land which would crowd out some farmers. The full owner is in the best financial position to compete for land. Progressive tax rates appear to lower this advantage. Limitations on dollar amounts of tax deductions and



credits would reduce tendencies for tax policies to encourage large farms to grow even larger.

Farm failures increase as instability increases especially in the case of the part owner and full renter. These low equity farmers are unable to meet cash obligations of the farm operations during bad years unless they have been able to acquire considerable equity fairly early. Instability enhances opportunities for the full owner to compete for available land, thus increasing the trend toward fewer and larger farms. The high consumption experiment illustrates that substantial real growth can be expected for farmers oriented to savings and investment at the expense of consumption for all levels of instability.

Each farming operation begins with owning or renting a typical commercial farming unit, with growth measured by accumulation of owned acres, first by purchasing formerly rented acres and then by expanding the size beyond the initial family size. The conclusion that cash flow is a major limiting factor in firm growth is consistent with previous analysis emphasizing the contribution of inflation to the cash flow problem. This phenomenon is especially apparent in the full renter and zero cash flow cases at high levels of instability.

#### Limitations and Areas for Future Research

The above situations were all simulated to determine how inflation, instability, borrowing limitations, and tax policies can influence the structure, growth, ownership, and survivability of family farms. Conclusions can be drawn based on these results, but it

must be recognized that the model has definite limitations when applied to structural and behavioral consequences apparent in the real world.

The model has several simplifying assumptions and computational shortcuts, and selected changes could improve the model. The problem affecting the payback of mortgages on land could be improved by allowing for refinancing opportunities to ease later years' burdens on principal payments. This would more effectively represent the real world.

Emphasis in this study was on growth over 30 years but more attention might be given to growth for individual years or short groups of years. This procedure would provide a better understanding of when the largest growth occurs and when growth is most limited for all levels of initial ownership.

The model could also be altered to better reveal how the level of instability affects the consumption rates of the various farm ownership levels. Results herein from fixed consumption and linear consumption functions related to income are of necessity oversimplified. A floating level of consumption would be related in various functional forms to the yearly level of income.

The "with or without" approach to policy variables tends to distort the resulting rates of growth and the implications for structural changes in agriculture. That is, termination of tax features would set in motion a whole chain of adjustments in land prices, output and other variables not considered herein. More information on coefficients of variation on net incomes and the affects of unanticipated increases and decreases in inflation on

growth, savings, and consumption are needed to more accurately draw conclusions for public policy.

### Conclusions

This study evaluated the impact of federal fiscal-monetary policies on the economic structure of typical family farms in a stochastic environment. Yearly income fluctuations were simulated for various coefficients of variation.

Growth rates were not markedly influenced by inflation. But inflation greatly affects entry. Inflation directly effects mortgage current land earnings relative to interest as evidenced by cash-flow problems for highly leveraged farmers. Cash-flow problems are reflected in lower total farm growth and the higher rate of failures of the low equity farmers. Failures were even more frequent at higher level of instability. Cash-flow limitations highly influenced the ownership possibilities available for a would-be farmer with a given equity. Growth which must be financed by internalized sources, is restrained by this cash flow in early years and accelerated in later years by cash-flow surplus. A pattern of slow initial growth in early years with more rapid growth in later years was typical for the low equity farmers. This is in contrast to the full equity farmer, who expanded every favorable year in the early part of the 30-year horizon and found himself mining equity in later years.

Tax policies affected different ownership situations in varying levels of expansion opportunities. Indexing of taxes had major impacts on the rate of wealth accumulation and farm failures. The effects of interest write-offs were very important to expanding

farmers. By reducing interest payments from taxes, they are more readily available to make it through low cash flow years. The full renter initial owner makes use of the depreciation allowances, because he has a high proportion of his assets in machinery.

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### Guide to the Appendix Tables

The following information is intended to simplify the interpretation of the large amount of data presented from the simulation runs. Table 1 presents the data acquired to derive the coefficient of variation on net farm income. Table 2 shows the rate that the simulated farmers were taxed. It presents the range, average, standard deviation and coefficient of variation on income and related variables. These values are associated with 11 individual farms and their respective data for the year 1972-1981. The values show tax rate percentages for the three ownership situations in year 1 and year 30.

Tables 3 through 20 present the selected balance sheet variables of the simulation runs. The tables are organized by coefficient of variation, equity/asset ratio and inflation. The tables start with the lowest values of coefficient of variation and equity/asset ratios at the 6 percent inflation rate. The equity/asset ratio is increased for each simulation to its highest value (0.0 to .20 to .40), then the coefficient of variation level is increased and the equity/asset increased at each level. Each coefficient of variation and equity/asset ratio is presented at 6 percent followed in the next table by the 12 percent inflation simulation. Each table shows values for the full owner, zero-cash flow and full renter scenarios.

The rows depict the year 1 values of the balance sheet variables followed by the increase after the 30 years for each of the tax experiments. The rows designated by the asterisks are yearly average



increases or decreases of the year one values. The columns present the balance sheet variables in 1979 dollars and acres, as noted in the tables. Most of the variables are basic values normally used, however some need further explanation. Personal income reported is net return total factors (land, labor, capital, and management) contributed to production by the farm operator. Columns for savings report the initial year and the increase or decrease in thirty years of personal income minus taxes paid. The resulting value then has the consumption level subtracted to arrive at the savings value reported.

The section reporting accumulated acreages gives a measure of changes in size for the various initial tenureships and experiments. the values of full equity and mortgaged acres are calculated from financial data and the current value of land. The difference (although not reported) between acres operated and acres fully owned and mortgaged is rented acreage.

All increases or decreases are values over the 30-year simulations for farms that survived. The blanks in the tables resulted from all 100 iterations of any particular experiment producing failures.

Tables 21 through 38 report the number of farm failures of each 100 iterations. The tables are ordered as are the previous mentioned set of tables, arranged by coefficient of variation, equity/asset ratio, and inflation. The rows are represented by the ownership scenarios with each followed by the nine experiments. The columns are split into three 10-year periods to analyze timing of bankruptcies. These three periods are summed into the last column, the total column.

Table 1. The Actual Range, Average, Standard Deviation and Coefficient of Variation for the Individual Farms, 1972-1981

Farm Variable	Minimum Value	Maximum Value	Mean	Standard Deviation	Coefficient of Variation
<u>Farm 1</u>					
Income	-55,375.35	219,475.65	54,559.64	91.847.04	168.34
% Equity	59	80	68.4	6.93	10.13
% Crop	23	87	54.4	22.99	42.28
<u>Farm 2</u>					
Income	18,271.89	57,021.09	33,627.52	14,422.00	42.88
% Equity	79	95	87.9	5.43	6.17
% Crop	32	79	59.2	16.44	27.77
<u>Farm 3</u>					
Income	-25,106.84	79,764.18	48,932.45	33,569.91	68.61
% Equity	79	92	86	5.01	5.83
% Crop	31	67	46.7	11.17	23.91
<u>Farm 4</u>					
Income	26,795.74	77,646.63	47,988.52	15,903.91	33.14
% Equity	78	90	85	4.19	4.93
% Crop	43	62	52.5	6.29	11.98
<u>Farm 5</u>					
Income	-3,978.08	123,377.98	32,329.14	36,876.58	114.06
% Equity	50	80	65.4	8.79	13.45
% Crop	10	78	37.2	19.12	51.39
<u>Farm 6</u>					
Income	-10,120.45	23,672.99	10,880.17	9,698.11	89.14
% Equity	51	69	57.9	6.37	10.99
% Crop	2	75	40.20	20.95	52.11
<u>Farm 7</u>					
Income	10,846.29	178,125.12	83,750.57	55,272.29	65.99
% Equity	86	97	91.5	3.63	3.97
% Crop	20	100	71.10	37.36	52.54
<u>Farm 8</u>					
Income	-50,931.26	85,015.59	21,449.10	46,970.40	218.98
% Equity	18	43	30.4	9.97	32.79
% Crop	7	98	28.10	27.65	98.38
<u>Farm 9</u>					
Income	4,867.26	75,228.57	30,773.14	22,247.34	72.30
% Equity	76	90	81.7	4.74	5.80
% Crop	24	76	45.7	13.71	30.00
<u>Farm 10</u>					
Income	27,399.85	170,064.90	93,652.37	40,272.82	43.00
% Equity	29	67	50.2	14.16	28.22
% Crop	21	73	44.2	16.05	36.31
<u>Farm 11</u>					
Income	-43,491.83	203,591.74	50,663.58	61,053.82	120.51
% Equity	65	87	77.90	6.62	8.50
% Crop	66	98	82.20	9.93	12.08

Table 2. Rate of Taxation on Personal Income and Net Worth in Percentage Terms

	Taxation (Percentage of Income)	Taxation (Percentage (of Net Worth)
Percent		
Year 1 Values:		
Full Owner	20.20	1.16
Zero Cash Flow	5.81	0.72
Full Renter	5.39	1.56
Year 30 Values		
.25 Coefficient of Variation		
Full Owner	20.17	0.68
Zero Cash Flow	3.56	0.14
Full Renter	2.10	0.10
.50 Coefficient of Variation		
Full Owner	26.54	0.78
Zero Cash Flow	10.32	0.27
Full Renter	8.93	0.43
.75 Coefficient of Variation		
Full Owner	41.81	1.16
Zero Cash Flow	25.29	0.61
Full Renter	32.19	0.75

Table 3. Results of Simulation Runs at 6% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of 0.0

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	62,859	12,703	37,556	1,091,647	1,091,647	960	960	0
Increase Over 30 Years								
Basic Comparison	63,904	12,874	49,318	2,638,305	4,149,025	4,307	161	4,146
	* 5,269	-3,356	20,312	(4.06%)				
W/O Tax Indexing	57,351	226,346	-171,010	-54,483	99,951	1,635	130	1,505
	* 13,696	60,783	-35,648	(-0.04%)				
W/ Higher Consumption	25,819	5,007	30,020	1,153,102	1,759,851	1,870	203	1,667
	* 1,958	-1,968	43,957	(2.37%)				
W/O Interest Write-off	36,219	33,960	312	1,102,028	1,664,051	1,831	66	1,765
	* 4,055	19,726	-4,284	(2.25%)				
W/O Depreciation Allowance	44,158	21,667	20,703	1,888,769	2,819,500	2,939	152	2,787
	* 9,024	5,858	14,711	(3.79%)				
W/O Investment Tax Credit	51,120	13,077	42,235	2,448,649	3,810,846	3,946	166	3,780
	* 6,035	-1,819	19,510	(3.88%)				
W/ Write-offs Limited to IM	66,278	13,207	51,299	2,657,145	4,215,678	4,366	154	4,212
	* 7,848	-2,400	21,947	(4.07%)				
W/ Write-offs Truncated by Wealth	68,055	14,527	51,799	2,625,166	4,097,801	4,270	155	4,115
	* 7,389	-2,759	21,837	(4.04%)				
W/ Write-offs Truncated by Income	66,115	13,727	50,590	2,588,328	4,089,387	4,248	147	4,101
	* 4,155	-3,649	19,508	(4.01%)				

Table 3. (Continued)

	PERSONAL TAXES		SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE	
	INCOME	PAID					FULL-EQUITY	MORTGAGED
	1979 Dollars				Acres			
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	14,574	847	1,127	117,055	250,940	960	55	128
Increase Over 30 Years								
Basic Consumption	12,731	127	11,715	578,159	887,986	213	29	920
	* 4,196	-341	16,970	(6.29%)				
W/O Tax Indexing	19,351	35,124	-17,192	329,691	335,795	0	24	443
	* 6,037	5,458	12,883	(4.74%)				
W/ Higher Consumption	8,033	-32	4,523	152,287	89,719	0	21	101
	* 4,981	-281	19,301	(2.90%)				
W/O Interest Write-off	13,076	3,689	8,267	356,614	441,201	0	22	466
	* 4,930	1,137	16,131	(4.95%)				
W/O Depreciation Allowance	11,448	2,034	8,491	463,979	649,111	45	31	662
	* 4,263	402	16,242	(5.65%)				
W/O Investment Tax Credit	10,556	466	9,253	553,412	839,052	168	29	855
	* 3,888	-248	16,558	(6.18%)				
W/ Write-offs Limited to LM	13,874	31	12,864	567,179	869,732	210	30	907
	* 3,801	-399	16,637	(6.24%)				
W/ Write-offs Truncated by Wealth	12,743	160	11,688	571,101	887,021	223	26	922
	* 4,609	-316	17,366	(6.30%)				
W/ Write-offs Truncated by Income	13,270	216	12,179	564,401	877,470	213	26	914
	* 4,687	-305	17,435	(6.24%)				

Table 3. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars				Acres			
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	18,945	1,022	5,322	65,169	65,169	960	0	0
Increase Over 30 Years								
Basic Comparison	7,149	-474	6,770	461,525	799,421	68	40	821
*	-511	-750	12,725	(7.44%)				
W/O Tax Indexing	12,555	27,873	-16,625	273,474	380,322	0	37	452
*	707	3,239	9,867	(5.87%)				
W/ Higher Consumption	-1,238	-707	960	47,047	74,682	0	20	83
*	-1,049	-729	16,079	(1.90%)				
W/O Interest Write-off	7,447	2,508	3,985	331,864	516,142	0	38	527
*	68	655	11,843	(6.45%)				
W/O Depreciation Allowance	5,856	740	4,338	381,675	623,281	13	48	615
*	524	-442	13,383	(6.87%)				
W/O Investment Tax Credit	6,091	-26	5,346	448,601	770,525	51	44	781
*	-96	-744	13,115	(7.38%)				
W/ Write-offs Limited to IM	3,356	-627	3,294	479,103	845,974	97	45	851
*	-604	-768	12,639	(7.45%)				
W/ Write-offs Truncated by Wealth	6,681	-450	6,318	479,218	827,247	79	44	845
*	-244	-724	12,953	(7.58%)				
W/ Write-offs Truncated by Income	6,152	-475	5,812	466,522	816,251	81	40	838
*	-496	-740	12,726	(7.49%)				

Table 4. Results of Simulation Runs at 12% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of 0.0

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: FULL OWNER								
VALUE IN YEAR 1	63,490	12,893	37,996	1,215,629	1,215,629	960	960	0
Increase Over 30 Years								
Basic Comparison	24,931	519	24,098	2,581,781	3,573,427	3,743	442	3,340
*	-12,941	-7,371	6,824	(4.00%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	12,315	782	15,800	993,033	1,304,767	1,447	277	1,170
*	-6,820	-4,270	38,794	(2.12%)				
W/O Interest Write-off	16,141	28,882	-13,114	1,236,099	1,635,024	1,814	250	1,564
*	-4,115	16,573	-8,454	(2.44%)				
W/O Depreciation Allowance	39,792	20,376	19,053	2,084,925	2,767,258	2,958	413	2,545
*	-5,025	80	7,228	(3.50%)				
W/O Investment Tax Credit	25,165	3,599	21,258	2,497,607	3,451,049	3,653	449	3,203
*	-10,215	-5,963	8,137	(3.92%)				
W/ Write-offs Limited to LM	22,085	-1,237	23,007	2,620,988	3,606,754	3,811	440	3,370
*	-12,551	-7,285	7,133	(4.03%)				
W/ Write-offs Truncated by Wealth	29,333	657	28,364	2,598,739	3,589,343	3,794	450	3,344
*	-9,808	-6,575	9,164	(4.02%)				
W/ Write-offs Truncated by Income	22,983	-583	23,251	2,608,737	3,607,462	3,811	442	3,369
*	-11,211	-6,819	8,012	(4.02%)				

Table 4. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: ZERO CASH FLOW								
VALUE IN YEAR 1	15,087	734	1,752	78,014	117,762	960	16	38
Increase Over 30 Years								
Basic Comparison	3,644	-388	3,786	347,674	452,405	0	76	429
*	1,144	-451	14,253	(6.00%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	352	-552	1,030	67,117	48,524	0	15	61
*	308	-589	16,447	(2.13%)				
W/O Interest Write-off	4,964	1,434	3,227	283,266	342,405	0	65	325
*	904	122	13,416	(5.40%)				
W/O Depreciation Allowance	4,257	525	3,446	289,630	356,308	0	68	329
*	1,508	-95	14,230	(5.49%)				
W/O Investment Tax Credit	3,258	-263	3,273	359,267	462,529	0	77	436
*	475	-511	13,639	(6.08%)				
W/ Write-offs Limited to 1M	4,221	-412	4,378	364,725	469,641	0	77	446
*	874	-480	14,011	(6.13%)				
W/ Write-offs Truncated by Wealth	3,385	-403	3,525	356,131	457,424	1	76	436
*	378	-517	13,553	(6.03%)				
W/ Write-offs Truncated by Income	5,075	-304	5,106	360,445	465,314	1	75	441
*	1,487	-411	14,556	(6.13%)				



Table 4. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	19,001	992	5,408	65,587	65,587	960	0	0
Increase Over 30 Years								
Basic Comparison	-646	-766	-127	332,555	466,188	0	79	438
*	-3,013	-822	10,465	(6.42%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	-3,770	-799	-463	22,352	34,875	0	13	52
*	-2,725	-823	15,054	(1.01%)				
W/O Interest Write-off	1,831	1,125	415	290,800	391,150	0	74	365
*	-2,267	-97	10,459	(6.03%)				
W/O Depreciation Allowance	-769	-552	-482	279,057	382,207	0	73	354
*	-2,989	-1,119	10,757	(5.90%)				
W/O Investment Tax Credit	938	-554	1,233	333,924	464,647	0	83	439
*	-2,233	-880	11,295	(6.44%)				
W/ Write-offs Limited to IM	1,224	-686	1,653	339,589	473,718	1	82	448
*	-2,336	-758	11,084	(6.49%)				
W/ Write-offs Truncated by Wealth	565	-671	977	342,763	476,249	0	80	451
*	-2,485	-757	10,928	(6.53%)				
W/ Write-offs Truncated by Income	326	-741	803	341,164	476,753	0	81	455
*	-3,290	-846	10,210	(6.49%)				

Table 5. Results of Simulation Runs at 6% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of .20

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars				Acres			
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	62,859	12,703	37,556	1,091,647	1,091,647	960	960	0
Increase Over 30 Years								
Basic Comparison	52,625	7,961	42,976	2,597,633	4,090,210	4,216	161	4,055
	* 5,269	-3,356	20,313	(4.02%)				
W/O Tax Indexing	64,319	241,714	-179,411	-66,789	87,887	1,613	122	1,491
	* 14,657	60,954	-34,849	(-0.08%)				
W/ Higher Consumption	28,409	5,924	31,139	1,148,920	1,756,459	1,870	205	1,665
	* 1,263	-2,230	43,691	(2.36%)				
W/O Interest Write-off	29,967	30,414	-2,341	1,089,647	1,645,117	1,812	58	1,754
	* 4,348	19,456	-3,723	(2.23%)				
W/O Depreciation Allowance	50,031	25,270	22,898	1,907,267	2,836,071	2,965	154	2,811
	* 6,184	4,890	12,838	(3.31%)				
W/O Investment Tax Credit	67,121	17,456	47,877	2,460,276	3,840,631	4,006	174	3,832
	* 7,760	-1,308	20,719	(3.89%)				
W/ Write-offs Limited to IM	64,376	13,829	48,877	2,611,059	4,145,346	4,315	139	4,176
	* 4,403	-3,349	19,474	(4.03%)				
W/ Write-offs Truncated by Wealth	71,852	14,513	55,513	2,573,483	4,068,395	4,241	157	4,084
	* 8,131	-2,346	22,170	(4.00%)				
W/ Write-offs Truncated by Income	62,892	11,982	49,121	2,554,064	4,053,298	4,214	147	4,067
	* 2,886	-3,981	18,570	(3.97%)				

Table 5. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	14,574	270	1,127	117,055	250,940	960	55	128
Increase Over 30 Years								
Basic Comparison	15,472	270	14,221	569,633	880,340	219	33	918
	* 5,072	-304	17,804	(6.28%)				
W/O Tax Indexing	17,133	30,470	-14,671	319,151	322,325	0	22	423
	* 5,849	5,174	12,989	(4.62%)				
W/ Higher Consumption	8,091	-49	4,378	162,907	109,853	-1	25	118
	* 4,126	-363	18,826	(3.02%)				
W/O Interest Write-off	11,614	3,223	7,360	363,291	448,460	-1	22	472
	* 4,804	1,131	16,015	(5.00%)				
W/O Depreciation Allowance	13,321	2,363	9,984	475,999	661,264	62	34	674
	* 5,215	464	17,127	(5.73%)				
W/O Investment Tax Credit	14,356	823	12,781	553,990	833,763	174	31	859
	* 4,743	-177	17,346	(6.19%)				
W/ Write-offs Limited to IM	11,246	-82	10,527	580,288	894,155	214	33	914
	* 3,766	-424	16,629	(6.31%)				
W/ Write-offs Truncated by Wealth	11,569	-117	10,854	574,445	908,610	214	39	913
	* 4,362	-361	17,151	(6.30%)				
W/ Write-offs Truncated by Income	11,510	-113	10,801	521,254	847,967	192	27	877
	* 4,236	-342	17,027	(6.16%)				

Table 5. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	18,945	1,022	5,322	65,169	65,169	960	0	0
Increase Over 30 Years								
Basic Comparison	7,327	-489	6,952	481,807	836,041	91	47	845
*	-764	-775	12,473	(7.52%)				
W/O Tax Indexing	10,280	23,580	-14,485	295,433	404,634	0	41	471
*	618	3,272	9,731	(6.11%)				
W/ Higher Consumption	-728	-693	1,154	55,747	85,095	0	22	90
*	-684	-738	16,370	(2.22%)				
W/O Interest Write-off	7,010	2,537	3,541	341,441	529,331	0	40	533
*	608	780	12,241	(6.54%)				
W/O Depreciation Allowance	-13,578	836	4,738	358,494	567,437	2	44	566
*	366	-462	13,268	(6.70%)				
W/O Investment Tax Credit	4,643	-356	4,283	454,373	791,193	50	46	792
*	-619	-886	12,725	(7.41%)				
W/ Write-off Limited to 1M	8,277	-441	7,852	443,611	765,521	51	38	793
*	-604	-739	12,627	(7.33%)				
W/ Write-offs Truncated by Wealth	4,125	-603	4,012	469,964	826,092	69	43	835
*	-770	-785	12,494	(7.51%)				
W/ Write-offs Truncated by Income	4,634	-477	4,395	477,240	831,669	75	46	842
*	-448	-750	12,775	(7.57%)				

Table 6. Results of Simulation Runs at 12% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of .20

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	63,490	12,893	37,996	1,215,629	1,215,629	960	960	0
Increase Over 30 Years								
Basic Comparison	25,527	273	24,924	2,618,561	3,631,418	3,840	450	3,389
*	12,273	-7,268	7,400	(4.03%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	14,644	1,919	16,077	985,677	1,299,697	1,442	275	1,166
*	-5,379	-3,766	38,962	(2.10%)				
W/O Interest Write-off	21,040	29,220	-8,566	1,212,429	1,583,409	1,773	241	1,532
*	-4,375	15,810	-7,950	(2.41%)				
W/O Depreciation Allowance	33,746	17,613	15,785	2,100,881	2,785,637	2,969	417	2,552
*	-6,490	-288	6,132	(3.52%)				
W/O Investment Tax Credit	19,785	751	18,728	2,503,595	3,462,008	3,650	448	3,201
*	-12,744	-6,843	6,484	(3.92%)				
W/ Write-offs Limited to IM	31,703	2,236	29,140	2,563,783	3,527,495	3,760	439	3,320
*	-11,509	-6,8389	7,730	(3.98%)				
W/ Write-offs Truncated by Wealth	20,987	-712	21,387	2,552,304	3,515,538	3,730	441	3,288
*	-15,779	-8,151	4,779	(3.97%)				
W/ Write-offs Truncated by Income	15,725	-3,654	19,069	2,627,742	3,662,202	3,832	457	3,375
*	-12,922	-7,498	6,975	(4.04%)				

Table 6. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	15,087	734	1,752	78,014	117,762	960	16	38
Increase Over 30 Years								
Basic Comparison	4,185	-366	4,298	345,634	445,120	0	73	426
*	581	-483	13,721	(5.97%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	3,085	-348	2,499	56,529	35,665	0	12	49
*	2,832	-394	17,643	(1.86%)				
W/O Interest Write-off	2,616	920	1,421	309,140	377,625	0	69	348
*	853	135	13,347	(5.66%)				
W/O Depreciation Allowance	5,979	757	4,909	306,555	378,374	0	70	353
*	1,708	-102	14,438	(5.66%)				
W/O Investment Tax Credit	3,409	-203	3,372	359,116	460,551	1	80	429
*	801	-484	13,935	(6.09%)				
W/ Write-offs Limited to IM	1,826	-466	2,059	373,703	485,673	1	80	460
*	-133	-552	13,076	(6.18%)				
W/ Write-offs Truncated by Wealth	3,750	-449	3,909	352,755	454,131	2	75	433
*	375	-501	13,537	(6.01%)				
W/ Write-offs Truncated by Income	4,249	-377	4,365	348,892	448,532	0	75	428
*	720	-486	13,804	(6.01%)				

Table 6. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	19,001	992	5,408	65,587	65,587	960	0	0
Increase Over 30 Years								
Basic Comparison	176	-655	600	336,522	468,666	0	85	440
*	-3,146	-761	11,260	(6.48%)				
W/O Tax Indexing	-----	-----	-----	-----	-----	-----	-----	-----
*	-----	-----	-----	-----				
W/ Higher Consumption	-1,898	-754	402	35,127	50,707	0	15	62
*	-2,216	-817	15,452	(1.55%)				
W/O Interest Write-off	466	1,183	-981	287,547	395,168	0	75	365
*	-2,339	-102	10,398	(5.98%)				
W/O Depreciation Allowance	2,393	107	1,974	271,514	365,273	0	71	343
*	-2,199	-878	11,302	(5.84%)				
W/O Investment Tax Credit	29	-682	457	338,986	468,780	0	84	438
*	-2,901	-998	10,739	(6.46%)				
W/ Write-offs Limited to LM	-335	-678	87	344,726	477,961	0	84	447
*	-2,660	-794	10,781	(6.53%)				
W/ Write-offs Truncated by Wealth	972	-700	1,413	353,228	493,519	2	82	466
*	-2,576	-783	10,856	(6.61%)				
W/ Write-offs Truncated by Income	1,022	-789	1,538	356,218	502,101	1	86	475
*	-3,322	-851	10,176	(6.58%)				

Table 7. Results of Full Owner Simulation Runs at 6% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of .40

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----							
	-----							Acres
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	62,859	12,703	37,556	1,091,647	1,091,647	960	960	0
Increase Over 30 Years								
Basic Comparison	64,415	11,963	50,677	2,666,213	4,252,937	4,378	156	4,222
	* 8,699	-2,214	22,606	(4.09%)				
W/O Tax Indexing	58,718	234,056	-177,351	52,928	191,413	1,525	128	1,397
	* 8,826	51,785	-31,538	(0.24%)				
W/ Higher Consumption	24,287	3,777	30,437	1,157,068	1,782,188	1,886	210	1,676
	* 3,407	-1,490	44,452	(2.37%)				
W/O Interest Write-off	32,238	31,871	-1,561	1,101,715	1,661,731	1,817	60	1,757
	* 4,492	19,954	-4,079	(2.25%)				
W/O Depreciation Allowance	51,295	25,343	24,072	1,920,997	2,857,404	2,988	155	2,833
	* 8,852	5,385	14,514	(3.33%)				
W/O Investment Tax Credit	63,249	16,258	45,218	2,456,134	3,851,403	4,003	148	3,855
	* 4,861	-2,066	18,608	(3.89%)				
W/ Write-offs Limited to 1M	58,639	10,107	46,766	2,592,075	4,070,421	4,214	148	4,066
	* 5,320	-3,397	20,416	(4.01%)				
W/ Write-offs Truncated by Wealth	57,197	11,361	44,253	2,608,451	4,144,784	4,298	153	4,145
	* 5,101	-3,288	20,101	(4.03%)				
W/ Write-offs Truncated by Income	59,986	11,346	46,898	2,585,694	4,108,152	4,260	137	4,123
	* 4,463	-3,327	19,510	(4.00%)				



Table 8. Results of Full Owner Simulation Runs at 12% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of .40

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	63,490	12,893	37,996	1,215,629	1,215,629	960	960	0
Increase Over 30 Years								
Basic Comparison	21,150	290	20,564	2,613,791	3,631,043	3,815	439	3,376
*	-13,299	-7,440	6,543	(4.03%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	12,485	1,161	15,654	1,001,470	1,318,191	1,458	280	1,178
*	-5,645	-3,964	39,201	(2.13%)				
W/O Interest Write-off	22,084	30,052	-8,367	1,219,137	1,592,680	1,775	244	1,530
*	-4,997	15,713	-8,447	(2.42%)				
W/O Depreciation Allowance	29,794	15,766	13,668	2,069,072	2,726,802	2,907	403	2,503
*	-8,538	-1,059	4,857	(3.48%)				
W/O Investment Tax Credit	19,450	349	18,790	2,497,843	3,445,796	3,623	434	3,189
*	-9,733	-5,815	8,470	(3.92%)				
W/ Write-offs Limited to IM	23,525	-1,260	24,449	2,567,460	3,533,881	3,745	438	3,307
*	-14,093	-7,680	5,992	(3.98%)				
W/ Write-offs Truncated by Wealth	22,921	681	21,941	2,584,113	3,570,716	3,786	435	3,351
*	-12,463	-7,125	7,066	(4.00%)				
W/ Write-offs Truncated by Income	25,063	-309	25,046	2,618,498	3,631,193	3,837	438	3,398
*	-13,449	-7,421	6,378	(4.03%)				

Table 9. Results of Simulation Runs at 6% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of 0.0

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	62,859	12,703	37,556	1,091,647	1,091,647	960	960	0
Increase Over 30 Years								
Basic Comparison	42,895	15,371	26,261	2,491,899	4,526,474	4,941	-399	5,340
	* -3,448	896	7,645	(3.92%)				
W/O Tax Indexing	55,961	225,852	-171,603	-295,350	-100,330	1,842	60	1,782
	* 12,326	67,071	-43,053	(-.96%)				
W/ Higher Consumption	34,059	9,278	27,802	1,010,930	1,657,333	1,815	29	1,786
	* 5,415	1,251	40,806	(2.15%)				
W/O Interest Write-off	23,897	33,602	-11,250	973,583	1,669,336	1,942	-212	2,154
	* -2,244	22,028	-12,548	(2.05%)				
W/O Depreciation Allowance	51,971	29,672	20,813	1,914,761	3,232,004	3,526	-257	3,783
	* 3,111	7,986	6,999	(3.32%)				
W/O Investment Tax Credit	26,460	15,433	9,797	2,439,184	4,283,767	4,648	-342	4,990
	* -5,369	512	6,071	(3.88%)				
W/ Write-offs Limited to 1M	46,004	14,590	30,172	2,579,536	4,677,770	5,033	-403	5,436
	* -2,524	862	8,595	(4.01%)				
W/ Write-offs Truncated by Wealth	54,238	17,975	34,947	2,534,470	4,442,709	4,861	-390	5,251
	* -8,257	-1,147	4,871	(3.95%)				
W/ Write-offs Truncated by Income	31,263	14,416	15,761	2,583,528	4,634,400	5,079	-455	5,534
	* -9,589	-918	3,321	(4.00%)				

Table 9. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	14,574	847	1,127	117,055	250,940	960	55	128
Increase Over 30 Years								
Basic Comparison	5,762	1,253	3,734	650,224	1,199,806	600	-55	1,432
*	-34	-123	12,480	(6.82%)				
W/O Tax Indexing	22,963	46,639	-25,025	214,215	230,623	40	-34	603
*	5,171	9,160	8,303	(3.62%)				
W/ Higher Consumption	8,213	-138	5,744	106,739	34,560	-1	-5	77
*	4,950	-500	21,102	(1.89%)				
W/O Interest Write-off	4,764	3,599	399	324,152	469,953	17	-55	699
*	1,501	2,002	11,837	(4.78%)				
W/O Depreciation Allowance	8,564	3,183	4,551	518,553	891,234	300	-55	1,132
*	223	378	12,225	(6.06%)				
W/O Investment Tax Credit	4,906	1,460	2,618	589,781	1,066,998	471	-55	1,303
*	160	-264	12,846	(6.60%)				
W/ Write-offs Limited to IM	2,682	656	1,260	614,976	1,149,597	565	-55	1,397
*	1,582	-56	14,062	(6.63%)				
W/ Write-offs Truncated by Wealth	3,604	1,792	6,015	641,041	1,195,213	595	-55	1,427
*	869	-117	13,390	(6.82%)				
W/ Write-offs Truncated by Income	11,747	930	10,026	633,599	1,156,177	546	-55	1,378
*	2,831	-169	15,345	(6.88%)				

Table 9. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----							
	----- Acres -----							
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	18,945	1,022	5,322	65,169	65,169	960	0	0
Increase Over 30 Years								
Basic Comparison	12,332	1,769	9,618	574,338	1,182,836	448	0	1,408
	* -2,678	-418	10,152	(8.57%)				
W/O Tax Indexing	13,417	37,396	-25,156	216,528	352,674	24	0	984
	* -458	7,621	4,224	(5.29%)				
W/ Higher Consumption	376	-593	1,336	35,963	72,200	0	13	133
	* -1,106	-887	16,925	(1.24%)				
W/O Interest Write-off	6,448	5,338	186	351,876	621,765	10	0	970
	* -1,034	2,402	8,911	(6.93%)				
W/O Depreciation Allowance	6,435	2,098	3,525	435,659	833,319	146	0	1,106
	* -2,416	-226	10,219	(7.57%)				
W/O Investment Tax Credit	3,795	1,338	1,761	532,558	1,086,696	351	0	1,311
	* -3,024	-584	9,996	(8.30%)				
W/ Write-offs Limited to IM	4,761	1,318	2,747	554,478	1,132,946	415	0	1,375
	* -3,077	-470	9,822	(8.39%)				
W/ Write-offs Truncated by Wealth	9,034	1,844	6,319	574,111	1,142,250	423	0	1,383
	* -4,404	-610	8,629	(8.37%)				
W/ Write-offs Truncated by Income	774	349	-262	589,660	1,184,091	431	0	1,391
	* -2,933	-573	10,058	(8.49%)				

Table 10. Results of Simulation Runs at 12% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of 0.0

	PERSONAL TAXES		SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE	
	INCOME	PAID					FULL-EQUITY	MORTGAGED
	----- 1979 Dollars ----- Acres -----							
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	63,490	12,893	37,996	1,215,629	1,215,629	960	960	0
Increase Over 30 Years								
Basic Comparison	-461	3,533	-4,225	2,346,198	3,421,897	3,750	-40	3,790
* -25,458	-5,381	-7,556	(3.77%)					
W/O Tax Indexing	----	----	----	----	----	----	----	----
* -----	-----	-----	-----	-----	-----	-----	-----	-----
W/ Higher Consumption	3,411	-176	9,612	845,979	1,154,840	1,307	156	1,151
* -7,769	-2,560	35,195	(1.87%)					
W/O Interest Write-off	16,875	31,279	-14,724	1,119,040	1,553,599	1,784	8	1,776
* -6,406	18,222	-12,234	(2.28%)					
W/O Depreciation Allowance	19,925	16,295	3,367	1,961,155	2,791,422	3,038	26	3,011
* -11,351	1,461	-318	(3.37%)					
W/O Investment Tax Credit	7,482	5,413	1,817	2,273,244	3,368,675	3,669	-7	3,676
* -22,244	-4,467	-5,250	(3.71%)					
W/ Write-offs Limited to IM	13,893	6,308	7,353	2,412,752	3,515,098	3,885	11	3,873
* -20,758	-3,923	-4,316	(3.84%)					
W/ Write-offs Truncated by Wealth	18,429	5,790	12,395	2,430,540	3,575,080	3,884	-26	3,910
* -23,202	-4,923	-5,753	(3.85%)					
W/ Write-offs Truncated by Income	-4,593	3,090	-7,898	2,417,041	3,545,527	3,877	8	3,869
* -22,744	-4,579	-5,646	(3.84%)					

Table 10. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	15,087	734	1,752	78,014	117,762	960	16	38
Increase Over 30 Years								
Basic Comparison	-70	-9	-263	446,698	656,276	78	-16	767
*	-1,716	-590	11,560	(7.00%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	997	-608	1,859	17,832	-10,426	0	9	42
*	1,237	-678	18,265	(0.19%)				
W/O Interest Write-off	2,371	1,667	500	273,320	358,511	0	-12	442
*	631	619	12,680	(5.55%)				
W/O Depreciation Allowance	2,585	690	1,698	303,300	412,841	9	-12	510
*	-701	-385	12,359	(5.83%)				
W/O Investment Tax Credit	1,238	-500	1,531	377,148	541,041	31	-14	637
*	-2,205	-807	11,294	(6.44%)				
W/ Write-offs Limited to IM	2,939	-83	2,818	425,432	618,375	82	-16	775
*	-1,637	-522	11,581	(6.71%)				
W/ Write-offs Truncated by Wealth	3,987	203	3,578	428,255	626,094	81	-16	786
*	-1,118	-536	12,107	(6.81%)				
W/ Write-offs Truncated by Income	-3,158	-252	-3,071	434,330	633,132	81	-16	780
*	-3,648	-725	9,766	(6.71%)				

Table 10. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----							
								Acres
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	19,001	992	5,408	65,587	65,587	960	0	0
Increase Over 30 Years								
Basic Comparison	-3,776	-576	-3,388	431,448	668,411	66	0	772
*	-6,391	-1,000	7,289	(7.44%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	-2,127	-900	275	5,568	13,233	0	13	57
*	-1,958	-1,045	16,693	(-0.05%)				
W/O Interest Write-off	1,945	2,549	-842	293,067	424,116	0	0	495
*	-2,145	764	9,744	(6.43%)				
W/O Depreciation Allowance	-4,252	-78	-4,370	303,957	456,507	14	7	529
*	-3,943	-950	9,663	(6.20%)				
W/O Investment Tax Credit	-3,910	-489	-3,612	345,160	534,895	24	0	646
*	-5,080	-962	8,575	(6.85%)				
W/ Write-offs Limited to LM	-2,679	-343	-2,510	368,978	575,132	43	0	683
*	-4,231	-783	9,245	(7.02%)				
W/ Write-offs Truncated by Wealth	1,611	-495	1,873	380,599	586,526	48	0	693
*	-4,078	-713	9,323	(7.24%)				
W/ Write-offs Truncated by Income	-1,319	-261	-1,264	372,965	578,820	37	0	693
*	-4,570	-770	8,886	(7.24%)				

Table 11. Results of Simulation Runs at 6% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of .20

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars				Acres			
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	62,859	12,703	37,556	1,091,647	1,091,647	960	960	0
Increase Over 30 Years								
Basic Comparison	47,693	17,263	29,232	2,551,363	4,620,413	5,011	-374	5,385
	* -892	1,354	9,725	(3.98%)				
W/O Tax Indexing	61,002	239,014	100,398	-163,824	56,797	1,909	32	1,877
	* 10,564	62,917	-40,643	(-0.42%)				
W/ Higher Consumption	23,158	7,024	22,731	1,001,105	1,654,059	1,821	39	1,782
	* 573	37	39,701	(2.12%)				
W/O Interest Write-off	24,383	33,021	-10,118	968,889	1,668,840	1,936	-226	2,162
	* 3,286	23,281	-8,253	(2.05%)				
W/O Depreciation Allowance	41,471	25,991	14,176	1,989,502	3,384,713	3,637	-216	3,853
	* 3,769	8,107	7,520	(3.40%)				
W/O Investment Tax Credit	45,019	17,956	25,767	2,471,556	4,406,348	4,747	-294	5,401
	* 3,856	3,394	12,408	(3.90%)				
W/ Write-offs Limited to IM	60,303	20,448	38,507	2,457,538	4,432,778	4,798	-418	5,216
	* -4,564	-141	7,571	(3.88%)				
W/ Write-offs Truncated by Wealth	39,437	13,009	25,198	2,438,893	4,358,002	4,839	-378	5,217
	* -7,340	-919	5,579	(3.85%)				
W/ Write-offs Truncated by Income	43,383	18,580	23,601	2,546,844	4,617,791	5,029	-460	5,489
	* -4,580	871	6,539	(3.98%)				



Table 11. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----							
	----- Acres -----							
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	14,574	874	1,127	117,055	250,940	960	55	128
Increase Over 30 Years								
Basic Comparison	16,933	2,241	13,735	680,540	1,207,078	627	-55	1,459
	* -12	-162	12,545	(6.88%)				
W/O Tax Indexing	25,290	51,544	-27,514	260,055	288,885	31	1	601
	* 8,136	10,123	10,282	(4.18%)				
W/ Higher Consumption	7,349	100	3,901	120,243	63,530	-1	-2	147
	* 2,597	-516	19,173	(2.31%)				
W/O Interest Write-off	12,989	6,329	5,623	395,005	560,075	27	-55	735
	* 4,215	2,913	13,580	(5.32%)				
W/O Depreciation Allowance	12,267	3,988	7,366	523,031	877,988	303	-55	1,097
	* 791	507	12,659	(5.95%)				
W/O Investment Tax Credit	10,633	1,674	8,095	679,490	1,175,388	585	-55	1,417
	* 689	-74	13,168	(6.78%)				
W/ Write-offs Limited to 1M	20,919	3,181	16,836	723,832	1,340,479	755	-55	1,587
	* 2,466	241	14,619	(7.08%)				
W/ Write-offs Truncated by Wealth	8,834	1,276	6,742	694,313	1,295,545	667	-55	1,499
	* 19	-50	12,490	(6.89%)				
W/ Write-offs Truncated by Income	12,429	1,931	9,628	726,044	1,332,227	738	-55	1,570
	* 928	126	13,198	(7.05%)				

Table 11. (Continued)

	PERSONAL TAXES		SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE	
	INCOME	PAID					FULL-EQUITY	MORTGAGED
----- 1979 Dollars -----								
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	18,945	1,022	5,322	65,169	65,169	960	0	0
Increase Over 30 Years								
Basic Comparison	-27,124	-1,216	-26,403	942,587	1,880,283	1,099	0	2,059
*	-9,002	-1,014	4,310	(9.62%)				
W/O Tax Indexing	18,982	40,164	-22,414	419,669	611,647	23	44	787
*	2,923	8,069	7,083	(7.19%)				
W/ Higher Consumption	2,834	-650	3,326	97,025	154,759	0	26	196
*	-247	-883	18,123	(3.34%)				
W/O Interest Write-off	3,217	3,717	-1,354	416,128	697,492	35	0	995
*	-2,809	2,564	6,958	(7.11%)				
W/O Depreciation Allowance	9,894	4,959	4,042	512,785	978,591	231	0	1,191
*	2,243	624	13,978	(8.00%)				
W/O Investment Tax Credit	17,254	1,966	14,643	706,014	1,298,104	631	0	1,591
*	-2,942	1,013	10,472	(8.70%)				
W/ Write-offs Limited to IM	20,447	4,047	15,415	572,932	1,136,467	466	0	1,426
*	-607	-4	11,865	(8.43%)				
W/ Write-offs Truncated by Wealth	18,307	1,531	16,040	834,486	1,577,719	813	0	1,773
*	-704	-673	12,327	(9.48%)				
W/ Write-offs Truncated by Income	22,972	1,022	20,794	779,612	1,423,500	623	0	1,583
*	-1,756	-744	11,323	(9.06%)				

Table 12. Results of Simulation Runs at 12% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of .20

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars				Acres			
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	63,490	12,893	37,996	1,215,629	1,215,629	960	960	0
Increase Over 30 Years								
Basic Comparison	-14,888	1,684	-16,792	2,387,789	3,597,089	3,911	-34	3,945
*	-25,820	-5,212	-8,082	(3.82%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----	----	----	----	----
W/ Higher Consumption	19,101	7,036	11,422	896,805	1,233,737	1,405	172	1,233
*	-4,605	-1,517	37,011	(1.95%)				
W/O Interest Write-off	11,329	30,101	-19,054	1,112,091	1,563,922	1,788	1	1,787
*	-6,808	18,143	-12,548	(2.27%)				
W/O Depreciation Allowance	2,804	10,588	-8,031	2,032,832	2,877,643	3,110	50	3,060
*	-17,187	-455	-4,252	(3.45%)				
W/O Investment Tax Credit	13,752	6,278	7,229	2,284,009	3,350,021	3,667	-14	3,681
*	-18,723	-3,047	-3,165	(3.70%)				
W/ Write-offs Limited to 1M	9,427	7,554	1,654	2,546,901	3,773,522	4,142	52	4,089
*	-17,789	-3,391	-1,878	(3.97%)				
W/ Write-offs Truncated by Wealth	-20,598	-2,415	-18,373	2,417,784	3,576,525	3,884	8	3,876
*	-25,531	-5,191	-7,822	(3.83%)				
W/ Write-offs Truncated by Income	1,086	5,033	-4,167	2,391,990	3,563,446	3,865	-24	3,889
*	-24,153	-5,124	-6,499	(3.82%)				

Table 12. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	15,087 <sup>a</sup>	734	1,752	78,014	117,762	960	16	38
Increase Over 30 Years								
Basic Comparison	-1,538	-412	-1,316	444,447	672,418	68	1	751
*	-1,322	-484	11,858	(6.87%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	3,240	-441	2,399	55,946	32,389	0	14	65
*	-333	-734	17,187	(1.76%)				
W/O Interest Write-off	3,959	3,542	190	343,616	460,361	2	6	522
*	629	1,245	12,027	(6.08%)				
W/O Depreciation Allowance	7,335	1,617	5,504	426,731	591,759	32	3	671
*	-2,248	-414	10,816	(6.63%)				
W/O Investment Tax Credit	6,218	497	5,524	470,524	681,977	97	0	779
*	-1,601	-529	11,612	(6.94%)				
W/ Write-offs Limited to IM	-5,140	-664	-4,632	473,807	688,504	71	-2	774
*	-3,636	-764	9,804	(6.97%)				
W/ Write-offs Truncated by Wealth	4,863	860	3,771	482,265	681,238	84	-4	802
*	-4,916	-692	8,458	(6.95%)				
W/ Write-offs Truncated by Income	-3,084	-400	-2,877	504,793	733,990	111	1	836
*	-2,937	-689	10,436	(7.17%)				

Table 12. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	- 1979 Dollars -						- Acres -	
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	19,001	992	5,408	65,587	65,587	960	0	0
Increase Over 30 Years								
Basic Comparison	-3,060	-136	-3,095	550,452	821,138	127	24	895
*	-4,653	-720	8,722	(8.14%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	47	-763	1,262	55,009	71,098	0	24	99
*	-4,217	-1,285	15,988	(2.14%)				
W/O Interest Write-off	5,688	3,838	1,587	347,190	488,031	0	23	546
*	-3,818	884	7,938	(6.65%)				
W/O Depreciation Allowance	-2,927	367	-3,479	392,404	581,932	10	38	617
*	-1,882	-640	11,385	(7.17%)				
W/O Investment Tax Credit	-8,445	-886	-7,709	461,607	709,810	68	15	783
*	-5,533	-1,103	8,241	(7.58%)				
W/ Write-offs Limited to LM	-4,695	-559	-4,290	510,272	779,955	67	12	854
*	-5,454	-877	8,088	(7.88%)				
W/ Write-offs Truncated by Wealth	-3,831	-460	-3,562	450,115	691,806	60	5	782
*	-6,082	-953	7,540	(7.47%)				
W/ Write-offs Truncated by Income	-3,909	-637	-3,443	454,732	703,271	67	2	794
*	-7,056	-1,099	6,719	(7.39%)				

Table 13. Results of Full Owner Simulation Runs at 6% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of .40

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----				----- Acres -----			
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	62,859	12,703	37,556	1,091,647	1,091,647	960	960	0
Increase Over 30 Years								
Basic Comparison	36,121	14,187	20,650	2,564,115	4,777,129	5,087	-221	5,308
	* -2,671	-190	9,469	(3.97%)				
W/O Tax Indexing	82,421	279,745	-199,301	188,527	454,535	1,871	-32	1,903
	* 8,543	46,061	-25,703	(0.56%)				
W/ Higher Consumption	17,238	6,027	20,401	1,020,660	1,675,197	1,836	33	1,803
	* -2,718	-892	39,052	(2.15%)				
W/O Interest Write-offs	25,797	33,912	-9,661	962,740	1,645,717	1,919	-232	2,151
	* 434	22,640	-10,462	(2.04%)				
W/O Depreciation Allowance	23,200	21,047	978	1,893,755	3,245,667	3,526	-281	3,807
	* 287	7,277	4,919	(3.29%)				
W/O Investment Tax Credit	11,273	10,397	-131	2,282,632	4,267,031	4,586	-309	4,895
	* -4,082	25	7,159	(3.72%)				
W/ Write-offs Limited to IM	57,361	14,688	41,241	2,473,586	4,454,497	4,828	-308	5,136
	* -4,648	-955	8,293	(3.90%)				
W/ Write-offs Truncated by Wealth	32,372	13,482	17,638	2,381,967	4,355,117	4,782	-297	5,079
	* -7,331	1,378	6,014	(3.79%)				
W/ Write-offs Truncated by Income	34,399	14,787	18,476	2,570,439	4,598,448	4,952	-300	5,252
	* -3,611	-544	8,901	(3.98%)				

Table 14. Results of Full Owner Simulation Runs at 12% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of .40

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	63,490	12,893	37,996	1,215,629	1,215,629	960	960	0
Increase Over 30 Years								
Basic Comparison	18,807	6,763	11,802	2,310,447	3,441,270	3,763	-43	3,805
*	-18,366	-2,895	-2,942	(3.76%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	6,878	1,688	9,717	850,564	1,161,521	1,326	158	1,168
*	-6,336	-1,764	35,553	(1.87%)				
W/O Interest Write-off	-1,611	25,654	-27,540	1,112,184	1,577,792	1,801	5	1,795
*	-11,435	16,655	-15,688	(2.26%)				
W/O Depreciation Allowance	14,141	13,969	-99	1,981,849	2,816,895	3,062	25	3,036
*	-17,770	-339	-4,933	(3.39%)				
W/O Investment Tax Credit	23,848	9,733	13,852	2,386,816	3,481,057	3,820	36	3,783
*	-14,781	-2,371	102	(3.82%)				
W/ Write-offs Limited to LM	325	2,175	-2,072	2,471,611	3,639,040	3,971	-11	3,981
*	-24,676	-5,373	-6,779	(3.89%)				
W/ Write-offs Truncated by Wealth	-7,548	-609	-7,170	2,504,886	3,710,909	4,021	3	4,017
*	-23,756	-5,027	-6,204	(3.92%)				
W/ Write-offs Truncated by Income	-1,868	1,664	-3,748	2,493,087	3,714,256	4,005	30	3,974
*	-21,492	-4,777	-4,188	(3.91%)				

Table 15. Results of Simulation Runs at 6% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of 0.0

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	62,859	12,703	37,556	1,091,647	1,091,647	960	960	0
Increase Over 30 Years								
Basic Comparison	35,192	28,294	5,838	2,426,679	5,137,886	6,074	-857	6,931
	* -7,534	8,764	-4,217	(3.85%)				
W/O Tax Indexing	77,847	296,626	-220,542	-768,240	-553,053	1,968	1	1,967
	* 12,604	78,067	-53,629	(-3.47%)				
W/ Higher Consumption	30,238	12,737	17,762	1,282,270	1,282,270	1,612	-82	1,694
	* 1,610	2,954	36,872	(1.63%)				
W/O Interest Write-off	18,671	35,664	-18,255	783,878	1,549,748	2,067	-462	2,529
	* -5,765	27,269	-21,137	(1.74%)				
W/O Depreciation Allowance	62,156	47,621	13,392	1,860,990	3,687,949	4,463	-703	5,166
	* -1,750	15,860	-5,585	(3.27%)				
W/O Investment Tax Credit	33,037	33,801	-1,935	1,975,329	4,099,541	5,142	-839	5,981
	* -19,263	5,814	-12,989	(3.38%)				
W/ Write-offs Limited to IM	59,832	32,451	26,285	2,340,333	4,934,043	5,818	-960	6,778
	* -12,876	7,060	-7,834	(3.73%)				
W/ Write-offs Truncated by Wealth	5,702	16,858	-12,178	2,199,977	4,685,005	5,590	-906	6,496
	* -20,011	5,382	-13,300	(3.61%)				
W/ Write-offs Truncated by Income	32,983	23,828	7,976	1,996,878	4,256,475	5,102	-960	6,062
	* -19,082	5,096	-12,078	(3.44%)				



Table 15. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----							
	----- Acres -----							
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	14,574	847	1,127	117,055	250,940	960	55	128
Increase Over 30 Years								
Basic Comparison	4,945	4,090	45	687,738	1,524,331	1,178	-55	2,010
*	-6,831	1,119	4,420	(7.38%)				
W/O Tax Indexing	33,974	71,435	-38,977	86,995	128,046	130	-51	777
*	5,369	15,287	2,318	(1.81%)				
W/ Higher Consumption	14,817	858	8,275	74,372	31,176	-1	-26	210
*	5,382	-202	22,110	(1.08%)				
W/O Interest Write-off	10,077	8,148	982	308,317	529,475	87	-55	919
*	-670	4,110	7,531	(5.00%)				
W/O Depreciation Allowance	1,287	5,555	-5,119	549,024	1,116,468	653	-55	1,485
*	-2,160	1,678	8,489	(6.77%)				
W/O Investment Tax Credit	-1,887	2,854	-5,460	671,515	1,490,577	1,052	-55	1,884
*	-2,492	1,018	8,828	(7.43%)				
W/ Write-offs Limited to IM	9,228	5,297	2,993	699,196	1,537,240	1,133	-55	1,965
*	-5,437	909	6,006	(7.55%)				
W/ Write-offs Truncated by Wealth	11,465	6,104	4,471	861,041	1,840,634	1,415	-55	2,247
*	-608	1,468	10,241	(8.30%)				
W/ Write-offs Truncated by Income	3,349	4,100	-1,586	740,973	1,661,627	1,203	-55	2,035
*	-1,775	1,590	8,983	(7.79%)				

Table 15. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	18,945	1,022	5,322	65,169	65,169	960	0	0
Increase Over 30 Years								
Basic Comparison	939	5,380	-5,257	777,695	1,841,855	1,215	0	2,175
*	-4,696	1,065	6,582	(10.41%)				
W/O Tax Indexing	20,947	65,467	-45,725	104,250	274,695	97	0	1,057
*	-2,150	13,855	-3,775	(3.93%)				
W/ Higher Consumption	4,888	-256	2,905	61,486	141,512	0	0	256
*	371	-533	18,005	(2.35%)				
W/O Interest Write-off	7,371	9,602	-3,125	325,759	687,959	60	0	1,020
*	-5,888	4,291	2,126	(7.31%)				
W/O Depreciation Allowance	-11,198	4,077	-15,973	529,538	1,227,864	597	0	1,557
*	-6,156	1,103	5,080	(8.86%)				
W/O Investment Tax Credit	-2,699	3,667	-7,252	712,920	1,632,212	1,069	0	2,029
*	-6,904	805	4,625	(9.97%)				
W/ Write-offs Limited to IM	8,198	4,680	2,631	601,595	1,453,530	872	0	1,832
*	-5,854	662	5,867	(9.84%)				
W/ Write-offs Truncated by Wealth	3,892	5,726	-2,687	750,702	1,735,573	1,153	0	2,113
*	-6,530	865	4,950	(10.34%)				
W/ Write-offs Truncated by Income	8,264	5,105	2,349	759,853	1,738,941	1,115	0	2,075
*	-5,116	954	6,272	(10.36%)				

Table 16. Results of Simulation Runs at 12% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of 0.0

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars				Acres			
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	63,490	12,893	37,996	1,215,629	1,215,629	960	960	0
Increase Over 30 Years								
Basic Comparison	-5,425	9,727	-15,378	2,226,203	3,491,890	4,028	-394	4,421
*	-30,299	-1,581	-16,153	(3.66%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	3,807	4,684	-119	616,057	874,252	1,122	21	1,101
*	-11,648	-1,351	31,111	(1.43%)				
W/O Interest Write-off	-19,419	23,076	-42,739	912,815	1,421,525	1,778	-263	2,041
*	-18,481	19,018	-25,021	(1.96%)				
W/O Depreciation Allowance	18,002	26,561	-8,827	1,947,653	2,924,498	3,438	-313	3,750
*	-29,310	1,256	-18,023	(3.35%)				
W/O Investment Tax Credit	-9,809	8,710	-18,746	2,151,630	3,345,499	3,854	-383	4,237
*	-28,828	266	-16,536	(3.57%)				
W/ Write-offs Limited to LM	945	9,596	-8,876	2,148,825	3,353,326	3,897	-370	4,266
*	-28,104	-137	-15,410	(3.58%)				
W/ Write-offs Truncated by Wealth	-15,589	7,384	-23,184	2,202,392	3,433,773	4,022	-361	4,383
*	-38,521	-2,637	-23,317	(3.63%)				
W/ Write-offs Truncated by Income	-24,854	12,756	-37,805	2,302,124	3,633,588	4,165	-395	4,559
*	-29,115	29	-16,570	(3.72%)				

Table 16. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	15,087	734	1,752	78,014	117,762	960	16	38
Increase Over 30 Years								
Basic Comparison	-3,216	809	-4,206	474,404	780,454	206	-16	1,055
*	-5,102	-295	7,891	(7.90%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	5,240	-398	3,845	14,506	-14,642	0	8	75
*	1,562	-814	20,215	(0.48%)				
W/O Interest Write-off	6,104	5,212	665	287,585	407,333	5	0	624
*	-1,929	1,487	9,244	(6.29%)				
W/O Depreciation Allowance	6,024	2,866	2,923	380,531	563,376	66	-16	809
*	-5,774	-477	7,379	(7.12%)				
W/O Investment Tax Credit	-8,309	833	-9,285	498,476	792,592	215	-16	1,070
*	-6,951	-709	6,451	(7.93%)				
W/ Write-offs Limited to IM	-1,954	980	-3,133	498,920	783,352	217	-16	1,075
*	-8,764	-674	4,592	(7.70%)				
W/ Write-offs Truncated by Wealth	-3,303	755	-4,246	445,096	739,872	142	-16	1,046
*	-5,250	-342	7,791	(8.03%)				
W/ Write-offs Truncated by Income	2,577	1,123	1,254	545,227	868,933	300	-16	1,168
*	-7,610	-467	5,538	(8.23%)				

Table 16. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	19,001	992	5,408	65,587	65,587	960	0	0
Increase Over 30 Years								
Basic Comparison	-8,865	360	-9,417	437,753	737,012	136	0	1,035
*	-9,609	-742	3,817	(8.50%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	3,600	-346	1,797	22,427	40,292	0	18	113
*	-4,555	-1,633	17,392	(1.04%)				
W/O Interest Write-off	-1,313	4,734	-6,257	329,421	522,274	14	0	729
*	-6,632	2,209	3,809	(7.37%)				
W/O Depreciation Allowance	-8,643	224	-9,035	356,004	589,569	68	0	796
*	-8,322	-1,100	5,444	(7.48%)				
W/O Investment Tax Credit	-7,091	563	-7,809	489,527	823,584	204	0	1,077
*	-8,067	-727	5,336	(8.72%)				
W/ Write-offs Limited to IM	-11,041	-152	-11,074	553,631	815,184	204	0	1,085
*	-11,533	-1,055	2,215	(8.43%)				
W/ Write-offs Truncated by Wealth	-7,868	196	-8,231	430,605	724,855	153	0	985
*	-6,951	-605	6,341	(8.30%)				
W/ Write-offs Truncated by Income	-6,574	324	-7,072	490,520	824,399	238	0	1,087
*	-9,760	-777	3,704	(8.59%)				

Table 17. Results of Simulation Runs at 6% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of .20

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----							----- Acres -----
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	62,859	12,703	37,556	1,091,647	1,091,647	960	960	0
Increase Over 30 Years								
Basic Comparison	13,014	17,545	-5,594	1,118,857	4,346,388	5,368	-729	6,097
	* -11,981	6,870	-6,748	(3.42%)				
W/O Tax Indexing	49,545	226,352	-178,259	-232,825	58,009	2,144	-61	2,205
	* 11,467	62,924	-39,611	(-0.65%)				
W/ Higher Consumption	16,269	7,994	13,222	749,431	1,367,194	1,733	-93	1,826
	* -14,517	-1,877	32,894	(1.67%)				
W/O Interest Write-off	19,013	35,904	-18,307	675,934	1,420,817	1,995	-552	2,547
	* -12,159	25,500	-25,734	(1.54%)				
W/O Depreciation Allowance	59,955	41,879	16,767	1,879,574	3,600,327	4,378	-634	5,012
	* -3,457	13,429	-4,890	(3.28%)				
W/O Investment Tax Credit	58,533	32,512	24,825	2,211,484	4,702,749	5,480	-914	6,394
	* -12,249	7,505	-7,667	(3.63%)				
W/ Write-offs Limited to IM	17,515	25,235	-8,831	2,120,693	4,546,725	5,491	-859	6,350
	* -11,701	7,781	-7,386	(3.54%)				
W/ Write-offs Truncated to Wealth	65,863	40,396	24,214	2,198,972	4,795,437	5,677	-954	6,631
	* -13,548	8,101	-9,561	(3.65%)				
W/ Write-offs Truncated to Income	42,843	29,398	12,255	2,357,805	4,097,278	5,878	-960	6,838
	* -20,990	5,603	-14,526	(3.82%)				

Table 17. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars				Acres			
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	14,574	847	1,127	117,055	250,940	960	55	128
Increase Over 30 Years								
Basic Comparison	8,123 * -12,521	-1,020 -395	9,142 130	1,256,512 (8.71%)	2,967,529	2,159	-55	2,991
W/O Tax Indexing	54,842 * 19,889	54,531 27,045	-1,702 4,957	360,983 (5.54%)	505,094	479	-40	1,279
W/ Higher Consumption	17,344 * 2,545	1,755 -271	9,176 20,572	176,189 (3.19%)	150,862	-1	-15	310
W/O Interest Write-off	31,939 * 969	20,808 6,476	9,777 6,649	511,232 (5.91%)	837,729	287	-55	1,119
W/O Depreciation Allowance	28,553 * 691	13,415 2,259	13,929 10,759	810,175 (7.29%)	1,594,967	1,119	-55	1,951
W/O Investment Tax Credit	-19,099 * 20,926	7,973 6,017	-28,078 27,050	1,688,903 (10.19%)	3,534,632	2,799	-55	3,631
W/ Write-offs Limited to IM	64,357 * -4,263	12,646 215	49,880 7,743	857,068 (7.68%)	1,142,774	819	-55	1,651
W/ Write-offs Truncated by Wealth	117,862 * 5,153	30,429 2,608	86,425 14,927	1,271,977 (9.24%)	2,359,271	2,239	-55	3,071
W/ Write-offs Truncated by Income	-12,379 * 3,667	324 1,994	-13,205 13,998	1,212,984 (8.91%)	2,348,284	1,779	-55	2,611

Table 17. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	18,945	1,022	5,322	65,169	65,169	960	0	0
Increase Over 30 Years								
Basic Comparison	----	----	----	----	----	----	----	----
*	----	----	----	----	----	----	----	----
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----	----	----	----	----
W/ Higher Consumption	-4,377	-1,420	-702	173,021	355,166	0	0	460
*	5,390	-97	22,378	(5.03%)				
W/O Interest Write-off	-21,135	-1,287	-19,847	514,511	815,081	179	13	986
*	3,179	5,944	9,452	(8.00%)				
W/O Depreciation Allowance	----	----	----	----	----	----	----	----
*	----	----	----	----	----	----	----	----
W/O Investment Tax Credit	----	----	----	----	----	----	----	----
*	----	----	----	----	----	----	----	----
W/ Write-offs Limited to LM	----	----	----	----	----	----	----	----
*	----	----	----	----	----	----	----	----
W/ Write-offs Truncated by Wealth	----	----	----	----	----	----	----	----
*	----	----	----	----	----	----	----	----
W/ Write-offs Truncated by Income	----	----	----	----	----	----	----	----
*	----	----	----	----	----	----	----	----



Table 18. Results of Simulation Runs at 12% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of .20

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	63,490	12,893	37,996	1,215,629	1,215,629	960	960	0
Increase Over 30 Years								
Basic Comparison	-15,958	10,201	-26,354	2,142,969	3,345,153	3,906	-376	4,281
*	-35,018	-2,626	-19,820	(3.56%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	13,800	6,035	7,427	649,867	911,910	1,161	24	176
*	-10,378	-2,124	33,890	(1.49%)				
W/O Interest Write-off	6,862	31,918	-25,318	948,711	1,444,655	1,775	-273	2,047
*	-10,723	20,817	-19,053	(2.03%)				
W/O Depreciation Allowance	11,836	20,991	-9,406	1,841,130	2,827,575	3,259	-343	3,602
*	-22,252	3,353	-13,059	(3.25%)				
W/O Investment Tax Credit	-26,334	7,615	-34,162	2,274,316	3,628,695	4,090	-903	4,476
*	-31,310	-1,345	-17,400	(3.70%)				
W/ Write-offs Limited to 1M	15,598	15,651	-297	2,024,850	3,152,033	3,736	-424	4,160
*	-27,959	330	-15,719	(3.48%)				
W/ Write-offs Truncated by Wealth	-6,619	10,821	-17,659	2,237,693	3,533,184	4,063	-347	4,410
*	-29,223	-1,381	-15,286	(3.64%)				
W/ Write-offs Truncated by Income	-14,857	13,666	-28,728	2,189,920	3,494,312	4,035	-388	4,423
*	-28,624	-352	-15,702	(3.63%)				

Table 18. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----						----- Acres -----	
INITIAL TENURE: ZERO CASH FLOW								
VALUES IN YEAR 1	15,087	734	1,752	78,014	117,762	960	16	38
Increase Over 30 Years								
Basic Comparison	-15,234	-223	-15,163	800,791	1,245,684	524	-16	1,461
*	-8,578	-391	4,463	(8.69%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	2,739	-376	1,612	82,795	66,522	0	17	134
*	-1,222	-1,115	18,763	(2.64%)				
W/O Interest Write-off	9,936	6,956	2,742	436,792	600,706	19	-16	754
*	-7,963	1,786	2,848	(6.58%)				
W/O Depreciation Allowance	-350	2,688	-3,242	698,904	1,043,913	315	-16	1,167
*	-8,758	-1,159	5,019	(8.01%)				
W/O Investment Tax Credit	-9,132	2,136	-11,427	874,324	1,315,121	649	-16	1,534
*	-5,182	37	7,416	(9.00%)				
W/ Write-offs Limited to 1M	-50,173	-1,230	-48,971	643,118	1,077,882	383	-16	1,359
*	-15,228	-749	-1,817	(8.00%)				
W/ Write-offs Truncated by Wealth	-14,643	2,049	-16,840	526,395	873,211	214	-16	1,174
*	-11,342	-287	1,627	(7.43%)				
W/ Write-offs Truncated by Income	-20,262	410	-20,835	633,904	961,543	298	-16	1,224
*	-11,503	-1,020	2,195	(7.91%)				

Table 18. (Continued)

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----							
								Acres
INITIAL TENURE: FULL RENTER								
VALUES IN YEAR 1	19,001	992	5,408	65,587	65,587	960	0	0
Increase Over 30 Years								
Basic Comparison	50,368	6,489	43,471	626,354	884,089	306	0	1,266
*	-14,012	-752	-632	(8.73%)				
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----				
W/ Higher Consumption	1,317	-298	1,989	135,216	188,407	0	27	232
*	-9,864	-2,562	16,484	(3.87%)				
W/O Interest Write-off	-4,122	7,123	-11,475	462,628	615,142	16	0	738
*	-1,526	-2,916	8,181	(7.29%)				
W/O Depreciation Allowance	-6,040	1,395	-7,612	600,863	931,328	250	0	1,097
*	-921	821	10,906	(8.87%)				
W/O Investment Tax Credit	-15,321	-638	-14,819	672,636	1,056,496	336	0	1,296
*	-12,473	-701	860	(8.97%)				
W/ Write-offs Limited to LM	-15,496	-1,283	-14,383	681,365	1,143,131	417	0	1,377
*	-16,641	-1,477	-2,491	(9.04%)				
W/ Write-offs Truncated by Wealth	36,194	8,134	27,788	748,712	1,163,445	433	0	1,399
*	-1,072	254	11,338	(9.86%)				
W/ Write-offs Truncated by Income	454	-453	767	625,156	971,210	239	0	1,199
*	-12,718	-1,281	1,233	(8.47%)				

Table 19. Results of Full Owner Simulation Runs at 6% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of .40

	PERSONAL	TAXES	SAVINGS	NET WORTH	OWNED	OPERATED	FARM SIZE	
	INCOME	PAID			ASSETS		FULL-EQUITY	MORTGAGED
	----- 1979 Dollars -----							
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	62,859	12,703	37,556	1,091,647	1,091,647	960	960	0
Increase Over 30 Years								
Basic Comparison	----	----	----	----	----	----	----	----
*	----	----	----	----	----	----	----	----
W/O Tax Indexing	----	----	----	----	----	----	----	----
*	----	----	----	----	----	----	----	----
W/ Higher Consumption	19,939	8,896	14,392	788,784	1,440,756	1,747	-96	1,843
*	540	2,642	32,281	(1.74%)				
W/O Interest Write-off	27,468	43,723	-17,628	800,593	1,669,189	2,142	-488	2,630
*	-2,772	27,680	-18,555	(1.77%)				
W/O Depreciation Allowance	-59,565	12,710	-73,374	1,733,046	3,337,021	3,810	-344	4,154
*	-1,487	7,165	3,341	(3.06%)				
W/O Investment Tax Credit	-67,736	-14,333	-53,404	2,316,848	5,216,507	5,279	-551	5,830
*	-34,497	-4,977	-17,483	(3.72%)				
W/ Write-offs Limited to LM	-17,561	72,734	-91,302	2,754,440	6,162,611	7,059	-268	7,327
*	24,444	11,456	25,007	(4.26%)				
W/ Write-offs Truncated by Wealth	61,959	3,110	56,835	2,086,450	4,197,808	4,319	-486	4,805
*	-830	699	10,381	(3.62%)				
W/ Write-offs Truncated by Income	377,144	156,222	218,907	2,733,933	5,301,532	6,559	-672	7,231
*	-54,129	-19,476	-22,654	(4.09%)				

Table 20. Results of Full Owner Simulation Runs at 12% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of .40

	PERSONAL INCOME	TAXES PAID	SAVINGS	NET WORTH	OWNED ASSETS	OPERATED	FARM SIZE FULL-EQUITY	MORTGAGED
	1979 Dollars						Acres	
INITIAL TENURE: FULL OWNER								
VALUES IN YEAR 1	63,490	12,893	37,996	1,215,629	1,215,629	960	960	0
Increase Over 30 Years								
Basic Comparison	11,513 * -33,698	15,083 -2,228	-3,797 -18,898	2,215,260 (3.64%)	3,460,798	3,986	-436	4,422
W/O Tax Indexing	----- * -----	----- -----	----- -----	----- -----	-----	-----	-----	-----
W/ Higher Consumption	14,118 * -4,064	5,741 -255	6,862 34,134	607,086 (1.41%)	873,247	1,132	34	1,098
W/O Interest Write-off	4,487 * -12,621	31,133 19,956	-26,890 -20,094	921,724 (1.98%)	1,413,256	1,768	-263	2,031
W/O Depreciation Allowance	12,046 * -13,403	22,645 3,619	-10,854 -10,487	1,906,740 (3.31%)	2,918,918	3,386	-298	3,683
W/O Investment Tax Credit	14,359 * -32,254	19,989 -1,968	-5,889 -17,719	2,044,935 (3.45%)	3,154,622	3,700	-378	4,077
W/ Write-offs Limited to 1M	6,304 * -28,027	9,302 -1,009	-3,207 -14,452	2,161,107 (3.59%)	3,368,117	3,879	-362	4,241
W/ Write-offs Truncated by Wealth	-13,650 * -29,512	10,228 -1,057	-24,094 -15,890	2,157,603 (3.58%)	3,359,480	3,870	-369	4,239
W/ Write-offs Truncated by Income	-22,466 * -36,084	9,612 -2,722	-32,278 -20,792	2,278,898 (3.63%)	3,600,644	4,129	-347	4,475

Table 21. Results on Number of Farm Failures at 6% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of 0.0

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	0	0
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to LM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	0	0
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to LM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	0	0
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to LM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0

Table 22. Results on Number of Farm Failures at 12% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of 0.0

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	100	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to 1M	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	100	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to 1M	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	100	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to 1M	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0

Table 23. Results on Number of Farm Failures at 6% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of .20

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	0	0
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to IM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	0	0
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to IM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	14	2	0	16
W/O Tax Indexing	11	0	0	11
W/ Higher Consumption	0	0	1	1
W/O Interest Write-off	11	0	0	11
W/O Depreciation Allowance	6	0	0	6
W/O Investment Tax Credit	8	1	0	9
W/ Write-offs Limited to IM	9	2	0	11
W/ Write-offs Truncated by Wealth	14	0	0	14
W/ Write-offs Truncated by Income	14	0	0	14



Table 24. Results on Number of Farm Failures at 12% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of .20

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	20	80	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to LM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	3	97	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to LM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	1	0	0	1
W/O Tax Indexing	2	1	97	100
W/ Higher Consumption	1	6	7	14
W/O Interest Write-off	1	0	0	1
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	2	0	0	2
W/ Write-offs Limited to LM	1	0	0	1
W/ Write-offs Truncated by Wealth	1	0	0	1
W/ Write-offs Truncated by Income	2	0	0	2

Table 25. Results on Number of Farm Failures of Full Owner Runs at 6% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of .40

	<u>YEARS 1-10</u>	<u>YEARS 11-20</u>	<u>YEARS 21-30</u>	<u>TOTALS</u>
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	72	72
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to LM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0

Table 26. Results on Number of Farm Failures of Full Owner Runs at 12% Inflation with Coefficient of Variation of .25 and Equity/Asset Ratio of .40

	<u>YEARS 1-10</u>	<u>YEARS 11-20</u>	<u>YEARS 21-30</u>	<u>TOTALS</u>
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	85	15	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to LM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0

Table 27. Results on Number of Farm Failures at 6% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of 0.0

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	0	0
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to LM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	0	0
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	1	0	0	1
W/ Write-offs Limited to LM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	2	2
W/ Higher Consumption	0	5	15	20
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	1	1
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to LM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0

Table 28. Results on Number of Farm Failures at 12% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of 0.0

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	16	84	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to IM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	21	79	100
W/ Higher Consumption	0	3	4	7
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to IM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	1	0	1
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	0	1	0	1
W/O Tax Indexing	0	21	79	100
W/ Higher Consumption	2	8	15	25
W/O Interest Write-off	0	1	0	1
W/O Depreciation Allowance	1	0	0	1
W/O Investment Tax Credit	0	1	0	1
W/ Write-offs Limited to IM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	1	0	1
W/ Write-offs Truncated by Income	1	0	0	1

Table 29. Results on Number of Farm Failures at 6% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of .20

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	26	26
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to 1M	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	45	7	1	53
W/O Tax Indexing	44	6	4	54
W/ Higher Consumption	6	0	0	6
W/O Interest Write-off	36	4	1	41
W/O Depreciation Allowance	44	4	0	48
W/O Investment Tax Credit	49	8	0	57
W/ Write-offs Limited to 1M	52	10	1	63
W/ Write-offs Truncated by Wealth	50	5	1	56
W/ Write-offs Truncated by Income	46	16	0	62
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	91	4	1	96
W/O Tax Indexing	91	4	0	95
W/ Consumption	53	25	3	81
W/O Interest Write-off	89	1	0	90
W/O Depreciation Allowance	84	7	0	91
W/O Investment Tax Credit	94	1	0	95
W/ Write-offs Limited to 1M	91	3	0	94
W/ Write-offs Truncated by Wealth	85	8	1	94
W/ Write-offs Truncated by Income	90	5	0	95

Table 30. Results on Number of Farm Failures at 12% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of .20

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	49	51	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to IM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	38	5	0	43
W/O Tax Indexing	40	24	36	100
W/ Higher Consumption	29	6	6	41
W/O Interest Write-off	50	2	0	52
W/O Depreciation Allowance	45	8	0	53
W/O Investment Tax Credit	40	3	0	43
W/ Write-offs Limited to IM	44	2	0	46
W/ Write-offs Truncated by Wealth	42	6	0	48
W/ Write-offs Truncated by Income	40	4	0	44
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	68	5	0	73
W/O Tax Indexing	64	13	23	100
W/ Higher Consumption	57	19	2	78
W/O Interest Write-off	55	3	0	58
W/O Depreciation Allowance	64	3	0	67
W/O Investment Tax Credit	49	5	0	54
W/ Write-offs Limited to IM	60	3	0	63
W/ Write-offs Truncated by Wealth	55	5	0	60
W/ Write-offs Truncated by Income	59	2	0	61

Table 31. Results on Number of Farm Failures of Full Owner Runs at 6% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of .40

	<u>YEARS 1-10</u>	<u>YEARS 11-20</u>	<u>YEARS 21-30</u>	<u>TOTALS</u>
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	13	33	7	53
W/O Tax Indexing	2	1	83	86
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	2	2	0	4
W/O Investment Tax Credit	8	31	4	43
W/ Write-offs Limited to IM	17	33	3	53
W/ Write-offs Truncated by Wealth	18	28	6	52
W/ Write-offs Truncated by Income	18	28	4	50



Table 32. Results on Number of Farm Failures of Full Owner Runs at 12% Inflation with Coefficient of Variation of .50 and Equity/Asset Ratio of .40

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
INITIAL TENURE: FULL OWNER				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	84	16	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to 1M	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0

Table 33. Results on Number of Farm Failures at 6% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of 0.0

	YEARS 1-10	YEARS 11-20	YEARS 20-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	0	28	28
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to IM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	2	5	1	8
W/O Tax Indexing	3	8	27	38
W/ Higher Consumption	2	8	8	18
W/O Interest Write-off	3	3	1	7
W/O Depreciation Allowance	2	1	2	5
W/O Investment Tax Credit	1	1	2	4
W/ Write-offs Limited to IM	3	6	1	10
W/ Write-offs Truncated by Wealth	3	5	1	9
W/ Write-offs Truncated by Income	1	2	0	3
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	13	8	1	22
W/O Tax Indexing	10	8	21	39
W/ Higher Consumption	12	20	7	39
W/O Interest Write-off	11	7	2	20
W/O Depreciation Allowance	11	4	0	15
W/O Investment Tax Credit	13	4	2	19
W/ Write-offs Limited to IM	14	5	1	20
W/ Write-offs Truncated by Wealth	16	11	1	28
W/ Write-offs Truncated by Income	20	10	0	30

Table 34. Results on Number of Farm Failures at 12% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of 0.0

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	47	53	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to IM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	9	3	0	12
W/O Tax Indexing	9	51	40	100
W/ Higher Consumption	14	21	12	47
W/O Interest Write-off	10	6	1	17
W/O Depreciation Allowance	9	4	0	13
W/O Investment Tax Credit	15	2	1	18
W/ Write-offs Limited to IM	11	6	1	18
W/ Write-offs Truncated by Wealth	7	1	0	8
W/ Write-offs Truncated by Income	11	0	1	12
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	23	7	0	30
W/O Tax Indexing	12	50	33	100
W/ Higher Consumption	25	24	12	61
W/O Interest Write-off	17	5	3	25
W/O Depreciation Allowance	13	10	0	23
W/O Investment Tax Credit	12	5	0	17
W/ Write-offs Limited to IM	18	4	1	23
W/ Write-offs Truncated by Wealth	11	5	2	18
W/ Write-offs Truncated by Income	11	2	0	13

Table 35. Results on Number of Farm Failures at 6% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of .20

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	1	0	1
W/O Tax Indexing	0	0	79	79
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	2	2
W/O Investment Tax Credit	0	2	1	3
W/ Write-offs Limited to 1M	0	0	1	1
W/ Write-offs Truncated by Wealth	0	3	2	5
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	93	6	0	99
W/O Tax Indexing	91	6	1	98
W/ Higher Consumption	61	10	5	76
W/O Interest Write-off	83	7	0	90
W/O Depreciation Allowance	84	9	2	95
W/O Investment Tax Credit	90	8	0	98
W/ Write-offs Limited to 1M	90	8	0	98
W/ Write-offs Truncated by Wealth	92	5	1	98
W/ Write-offs Truncated by Income	86	8	2	96
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	100	0	0	100
W/O Tax Indexing	97	3	0	100
W/ Higher Consumption	86	10	2	98
W/O Interest Write-off	98	0	0	98
W/O Depreciation Allowance	100	0	0	100
W/O Investment Tax Credit	100	0	0	100
W/ Write-offs Limited to 1M	99	1	0	100
W/ Write-offs Truncated by Wealth	100	0	0	100
W/ Write-offs Truncated by Income	99	1	0	100

Table 36. Results on Number of Farm Failures at 12% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of .20

	YEARS 1-10	YEARS 11-20	YEARS 21-30	TOTALS
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	0	0	0	0
W/O Tax Indexing	0	71	29	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	0	0	0	0
W/O Investment Tax Credit	0	0	0	0
W/ Write-offs Limited to IM	0	0	0	0
W/ Write-offs Truncated by Wealth	0	0	0	0
W/ Write-offs Truncated by Income	0	0	0	0
<b>INITIAL TENURE: ZERO CASH FLOW</b>				
Basic Comparison	80	3	1	84
W/O Tax Indexing	83	13	4	100
W/ Higher Consumption	66	16	2	84
W/O Interest Write-off	84	4	0	88
W/O Depreciation Allowance	82	8	0	90
W/O Investment Tax Credit	86	2	0	88
W/ Write-offs Limited to IM	80	4	1	85
W/ Write-offs Truncated by Wealth	86	3	0	89
W/ Write-offs Truncated by Income	80	5	0	85
<b>INITIAL TENURE: FULL RENTER</b>				
Basic Comparison	92	5	0	97
W/O Tax Indexing	85	10	5	100
W/ Higher Consumption	85	9	0	84
W/O Interest Write-off	79	9	0	88
W/O Depreciation Allowance	83	5	1	89
W/O Investment Tax Credit	86	2	0	88
W/ Write-offs Limited to IM	87	6	0	93
W/ Write-offs Truncated by Wealth	86	8	0	94
W/ Write-offs Truncated by Income	90	5	0	95

Table 37. Results on Number of Farm Failures of Full Owner Runs at 6% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of .40

	<u>YEARS 1-10</u>	<u>YEARS 11-20</u>	<u>YEARS 21-30</u>	<u>TOTALS</u>
<b>INITIAL TENURE: FULL OWNER</b>				
Basic Comparison	55	42	3	100
W/O Tax Indexing	42	18	40	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	11	12	7	30
W/O Depreciation Allowance	43	40	6	89
W/O Investment Tax Credit	54	40	4	98
W/ Write-offs Limited IM	60	34	4	98
W/ Write-offs Truncated by Wealth	62	35	2	99
W/ Write-offs Truncated by Income	68	27	4	99

Table 38. Results on Number of Farm Failures of Full Owner Runs at 12% Inflation with Coefficient of Variation of .75 and Equity/Asset Ratio of .40

	<u>YEARS 1-10</u>	<u>YEARS 11-20</u>	<u>YEARS 21-30</u>	<u>TOTALS</u>
INITIAL TENURE: FULL OWNER				
Basic Comparison	5	5	4	14
W/O Tax Indexing	0	96	4	100
W/ Higher Consumption	0	0	0	0
W/O Interest Write-off	0	0	0	0
W/O Depreciation Allowance	1	7	2	10
W/O Investment Tax Credit	1	9	3	13
W/ Write-offs Limited to 1M	3	10	1	14
W/ Write-offs Truncated by Wealth	3	7	5	15
W/ Write-offs Truncated by Income	2	12	2	16

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