Impact of Milk Income Loss Contract (MILC) and Section 179 Expensing on Rates of Return for Alternative Dairy Systems

By Phillip R. Eberle, Darren E. Moody, C. Matthew Rendleman, and William C. Peterson

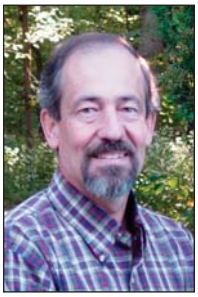
Abstract

The impact of the Milk Income Loss Contract (MILC) and Section 179 expensing on internal rate of returns (IRR) for three dairy systems, a 120-cow grazing, a 120-cow conventional, and 600-cow concentrated was evaluated. With MILC, the grazing and conventional systems had higher IRRs. Without MILC, the 600-cow dairy had the highest IRR. Without Sec. 179, IRRs declined proportionally more for grazing and conventional systems.

Introduction

Trends for the U.S. dairy industry indicate structural changes, particularly declining numbers of farms, increasing productivity per cow, increasing size of dairy farms, and a geographical shift in production to the West and Southwest (USDA-NASS). A driving cause of these changes is the pursuit of lower costs of production. To illustrate the structural changes, Table 1 provides a comparison between Illinois, Wisconsin, California, and the U.S. California has larger dairy herds, greater milk production per cow, and lower cost of production per cwt of milk than Illinois and Wisconsin.






Phillip R. Eberle is an associate professor in the Department of Agribusiness Economics at Southern Illinois University Carbondale. His teaching and research focus is in the subject areas of farm management and rural appraisal. He received a B.A. from Whitworth College, an M.A. from Washington State University, and a Ph.D. from Iowa State University.

Darren E. Moody is a former graduate student in the Department of Agribusiness Economics at Southern Illinois University Carbondale. He is currently self-employed with Moody Farms Partnership, Paris, Illinois. He received his B.S. from the University of Illinois and an M.S. from Southern Illinois University.

C. Matthew Rendleman is an associate professor in the Department of Agribusiness Economics at Southern Illinois University Carbondale. His teaching and research focus is in the subject areas of economic policy and rural development. He has done research related to ethanol and animal health issues. He received a B.S. and an M.S. from Southern Illinois University Carbondale, and a M.S. and Ph.D. from Purdue University.

William C. Peterson is a researcher in the Department of Agribusiness Economics at Southern Illinois University Carbondale. His research focus has been in rural development and Environmental issues. He received a B.S. from Northern Michigan University, an A.M. Bowdoin College, an M.S. from Michigan State University and a Ph.D. from Iowa State University.

It is apparent that Illinois' dairy industry and to a lesser extent Wisconsin's dairy industry as well as other neighboring states will need to be more cost competitive to sustain or expand their dairy industries. A review of literature and farm business records suggests three means to reduce the cost or improve the returns to dairy. These methods are intensive grazing, increase size of operation to 600 cows to capture size economies, increase milk yield per cow above average yields, and reduce other inefficiencies. Decisions to invest in these means will also depend on federal milk programs and federal tax laws.

A report by Hamilton, Young, and Hurley has described the advantages of the intensive grazing system as reduced feed purchases, reduced investment in machinery and buildings, and reduced labor in feed preparation and waste management. Studies by Hanson, et al., Kriegl, and CIAS found that pasture dairy systems were more profitable than conventional systems of similar size.

Short indicated that dairy farms of 500 cows or more had lower operating and ownership costs. Larger farms make better use of capital and labor and typically have higher milk yields per cow. A study of farm records by Tauer also found that larger dairy farms had lower costs of production, but indicated that most of the high costs on small farms are due to inefficiencies. Once inefficiencies are equalized, costs for a 50-cow farm are only 4 percent higher than a 500-cow farm. Analysis of Illinois Farm Business Records indicates milk yields of the top one-third of dairy farms (average size 93 cows) have milk yields comparable to the average yield of western states.

Changes in farm programs since 2002 have implications for dairy farms considering investments in a dairy system to become more cost competitive. The Milk Income Loss Contract (MILC) administered by the USDA Farm Service Agency and authorized in the 2002 Farm Bill financially compensates milk producers when domestic milk prices fall below a specified level (USDA-FSA). Payments are issued up to a maximum of 2.4 million pounds of milk produced and marketed by the operation per fiscal year (USDA-FSA) which would be the amount of milk produced by about a 120 cow dairy herd. Thus the program payments benefit small producers more than large producers. The MILC program is scheduled to expire September 30, 2005. The program faces opposition for renewal from taxpayer advocacy groups and from milk producers from western states. President Bush declared support for the program during campaign stops in Wisconsin (Doane's Agricultural Report). Currently legislation is proposed to extend the program to 2007 (Bailey 2005, p. 3)[1]. Possible continuation of the MILC program would impact investment decisions of smaller dairy farms relative to larger farms.

Methods of depreciating or expensing assets impact investment decisions. Jobs and Growth Tax Relief Reconciliation Act of 2003 increases Section 179 expensing of qualifying cost recovery investments to $100,000 and adjusted for inflation after that, but this change expires after 2005.[2] This increase in Section 179 is sufficient to allow smaller dairy producers to expense their dairy replacements annually whereas a larger producer would need to depreciate a portion of their replacements. Section 179 allows smaller producers to write off a larger share of their investment faster than a larger operation.

This study compares the impact of extending MILC and the larger section 179 expense deduction beyond their current expiration to 20 years in the future versus no MILC payments or Section 179 expensing over the investment life of three alternative dairy systems. The three alternative dairy systems are: a 120-cow intensive grazing pasture system, a more efficient conventional 120-cow system, and a 600-cow concentrated feeding system. The 120-cow operations were selected to take full advantage of MILC payment limits. Also, a 120-cow operation would employ two full-time operators. This allows for planning vacations and time off that has been considered a drawback to a single-person operation.

Objective

The specific research questions are: (1) How much capital investment is required to implement each of the three dairy systems? (2) How does the type of system and investment affect the revenues and cost structure of the dairy operation? (3) How does the MILC program impact the rate of return on investment for the alternative dairy systems? (4) How does the current higher level of Section 179 expensing impact rate of return for the alternative dairy systems?

Method

Investments were analyzed by comparing internal rates of return. Differences in the size of initial investment between systems ruled out comparisons of net present value. Internal rate of return is the discount rate (r) that results in a net present value (NPV) of zero. Net present value is the future discounted annual net cash flows resulting from the investment minus the investment outlay.

$$NPV=P_1/(1+r)^1 + P_2/(1+r)^2 +\ldots+P_n/(1+r)^n + S_n/(1+r)^n - C$$

where P_i = annual net cash flow in year i as a result of the investment,
r = discount rate,
S_n = salvage value of investment or terminal value
C = initial outlay for the investment.

Annual net cash flow (P_i) for this analysis is defined as:

$$P_i = CI_i - CE_i - T_i$$

where CI_i = cash inflow from project for year i,
CE_i = cash expenses from project for year i,
T_i = federal and state income tax liability for year i,
$T_i = (CI_i - CE_i - D_i) \times t$,
D_i = depreciation or cost recovery for year i, and
t = marginal federal (28%) and state (3%) tax rate assumed to be 31 percent.

Sources of data for each component of the IRR model are discussed.

Cost and return estimates and capital requirements for each system were developed from secondary sources including cost and return estimates and planning guides from Michigan State, Kansas State, University of Illinois, University of Missouri-Columbia, Ohio State University and Virginia Tech (See Bailey, et al.; Bhandary, et al.; Dartt and Schwab; Groover; Jones, and Murphy; and Moore). Cost and return estimates for the alternative systems are available from the authors. This investment analysis was constructed using data collected from universities that have a climate similar to Illinois. Future revenues were based on milk price projections for Illinois from FAPRI. Feed prices were also based on an average of future projected prices by FAPRI (2001a). After-tax net cash flows were projected for 20 years into the future.

Investment Outlay

Investment in facilities and equipment can vary greatly from each system. Publications on rotational grazing (Hamilton, Young and Hurley) often mention using used materials and modifying existing dairy facilities rather than building all new facilities to obtain labor efficiencies in milking. For purposes of this analysis all investments in facilities and equipment are considered new. Table 2 presents the investment outlay for each system. Total investment outlay for buildings and equipment were $1,657,919 for concentrated system, $256,000 for the intensive grazing, and $436,206 for the conventional system. Table 3 presents the total investment in land (for dairy facilities only), livestock, buildings and equipment.

Receipts

Receipts for the dairy cost and return estimates included milk, cull cows, bull calves, heifers, and government revenue. Milk sales included the price per pound and the pounds sold per cow. Prices were an average of the projected future prices for 2003-2007 (FAPRI).

A death loss of two percent was assumed in all cases. The cull rate was assumed to be one-third. The expected number of calves per cow in the herd is 0.6. The government revenue was from the Milk Income Loss Contract Program (MILC). According to the Farm Service Agency, MILC payments are made on a monthly basis when the Boston Class I milk price falls below $16.94 per hundredweight. Payment rates will be determined by multiplying 45 percent of the difference between 16.94 and the Boston Class I milk price for that month (USDA-FSA). Payments are issued up to a maximum of 2.4 million pounds of milk produced and marketed by the operation per fiscal year (USDA-FSA). A spreadsheet developed by the University of Wisconsin was used to calculate the annual revenue for the three different dairy systems. Milk price projections for Massachusetts by FAPRI were used as an estimate of the Boston Class I milk price.

Variable Costs

Variable costs for the budget included purchase of replacements along with feed costs and other variable costs. Feed costs were established according to the type of system and the requirements needed. Corn or corn equivalent, corn silage, hay or hay equivalent, protein, and salt and minerals were included

in the feed costs. Prices for corn, hay, and soybean oil meal were calculated using the FAPRI outlook prices averaged from 2003 to 2007. Whether feeds were purchased or raised they were valued at those average prices. Pasture was valued at the hay equivalent value less a charge for harvesting and storage. Pasture accounted for 40 percent of the dry matter requirements for the grazing system.

Feeds fed and feed cost also depended on the milk yield rate. For the pasture system milk yields of 16,000 and 17,000 lbs per cow per year were assumed. For the conventional and concentrated systems, milk yields of 21,000 and 24,000 lbs per cow per year were assumed.

Other variable costs included marketing. Most of marketing costs were for hauling and transport charges, but also included promotional charges.

Bedding costs were assumed to be sand based at $40 per ton.

Veterinary cost estimates were from the University of Illinois cost and return estimates. These costs included the on-farm hiring of a veterinarian and the medications supplied to the herd. Veterinarian costs were not lowered for the grazing system despite anecdotal evidence that less is needed.

The fuel costs are the costs of operating the machinery and equipment needed on the dairy enterprise. These costs did not include the fuel costs associated with growing feed in the 120 cow system. Those costs are accounted for by the cost of feeds.

Building and equipment repairs were a percentage of the total original investment. Building repairs were 1.7 percent of original investment. Equipment was 2.1 percent of original investment.

Accounting and testing expenses were from the University of Illinois cost and return estimates.

Breeding costs were based on the use of artificial insemination at $35 per cow. Water and sewage costs for the conventional and concentrated system were $20 per cow higher than for the grazing system.

Cash Fixed Costs

Fixed costs included family and hired labor, building insurance and taxes, and equipment insurance and taxes. Family and hired labor were charged at $8.00 per hour. All labor requirements used in the cost and return estimates were found in the Michigan State University budgets (Dartt and Schwab). They estimated a grazing dairy requiring 49 hours per cow as compared to 69 hours of labor for the conventional and concentrated.

Building taxes and insurance was one percent on the annual average investment. Equipment insurance was 3.6 percent of average investment. A management charge of five percent of the total receipts was also charged.

Salvage Values

Land for the dairy site was assumed to increase in value at 2.5 percent a year. Buildings and equipment had a zero salvage value. The dairy herd maintained its value through purchase of replacements.

Depreciation

Investment assets were divided into 5-, 7-, 10-, and 20-year recovery periods to calculate depreciation for tax purposes. Equipment and machinery were considered 5- or 7-year recovery property. The milking parlor was 10-year recovery property and the barn and feed facilities were 20-year recovery periods. For this analysis, Section 179 expensing using the 2004 maximum limit of $102,000 was assumed for all year when using 179 expensing.

Results

The results presented address the previously stated research questions.

1. How much capital investment is required to implement each of the three dairy systems? Intensive grazing has the lowest investment per cow at $3,661, followed by the concentrated system at $4,139 per cow investment, and finally the conventional dairy had an investment of $5,163 (Table 3).

2. How does the type of system and investment affect the revenues and cost structure of the dairy operation? Table 4

summarizes the costs and returns for each dairy system on a per cow basis for alternative milk yields. The receipts for the intensive grazing system were noticeably less than the conventional and confinement systems due to the difference in milk production. The intensive grazing system produced 5,000 to 8,000 lbs per cow less than the conventional and concentrated feeding operations. Currently the top one-third of Illinois milk producers have production yields equivalent to 21,000 lbs. per cow per year. The conventional system had the largest amount of government revenue per cow due to the fact that the conventional system was able to produce close to the maximum amount of milk production qualifying for MILC payments.

Feed costs in the intensive grazing system ranged from $819 to $838 per cow compared to a range of $1,114 to $1,264 per cow for the other two systems. The intensive grazing system had lower feed costs because of the ability to allow the cows to receive some of their nutritional intake from pasture and because of the lower milk production. The conventional system had higher total costs than the concentrated feeding operation due to the higher initial investment per cow.

The conventional system had the highest before tax net cash flow when compared to the other two systems, but without the government revenue the concentrated feeding system would have the highest net before tax cash flow due to its milk yield and lower costs than the conventional system.

3. How does the MILC program impact the rate of return on investment for the alternative dairy systems? The intensive grazing system at 17,000 lbs had the highest after-tax with MILC rate of return on investment (12.38%) followed by the conventional system at 24,000 lbs (11.12%) then the concentrated system at 24,000 lbs (9.92%) (Table 5). The intensive grazing system at 17,000 lbs also had the highest rate of return on a before tax basis, but the concentrated system at 24,000 lbs had the second highest rate of return. Without MILC payments, the 600-cow concentrated feeding system at 24,000 lbs had the highest rate of return on investment on both a before and after tax basis then followed by the conventional system at 24,000 lbs and then the intensive pasture system. Thus, the absence of MILC payments reversed the order of dairy system that had the highest return on investment.
4. How does the current higher level of section 179 expensing impact rate of return for the alternative dairy systems? Rates of return without section 179 expensing resulted in lower overall rates of return (Table 6). Comparing the rate of returns with section 179 (Table 5) and without section 179 (Table 6) indicates that the intensive grazing system had the biggest difference in returns. The intensive grazing systems had a 2.88 to 2.95 percent decline in the rate of return without section 179 expensing compared to a 0.95 to 1.07 percent decline for the concentrated system. The conventional system had between 2.20 and 2.34 percent declines in rate of returns. This greater decline for intensive grazing is because of the greater proportion of its investment that was depreciated through section 179 expensing. Intensive grazing had a lower investment per cow and was not limited by the $102,000 annual expense limit as was the concentrated system.

Conclusions

Although this type of analysis is limited by the assumptions used in budgeting for the three systems, it does illustrate how continuation of the MILC program could impact investment decisions of milk producers. The analysis especially illustrates why smaller milk producers are likely to support the renewal of MILC, and why the program has not received support from western states with large size dairy herds (Bailey 2005, p. 3).

Our results also indicates that extending Section 179 expense limits at the higher $100,000 values beyond 2005 perhaps could have relatively larger impact on smaller investors who could expense a larger share of their investment. This result would likely be modified if we relaxed our assumption that the smaller and larger systems had the same marginal tax rate.
If our cost and return assumptions are basically correct, our results also supports the structural shift that we observe in the industry toward larger dairy units.

Endnotes

1 The Agricultural Reconciliation Act of 2005 reauthorized MILC program, now known as MILCX, through Sept. 30, 2007 (USDA-FSA).

2 The American Jobs Creation Act extended the $100,000 section 179 expense deduction through 2007.

References

Bailey, K., "Dairy Programs Face Difficult Future," Staff paper #373, Dept. of Agricultural Economics and Rural Sociology, The Pennsylvania State University. March 2005.

Bailey, K., M. Bennett, J. Garrett, D. Hardin, J. Hoehne, R. Randle, J. Spain, B. Steevens, J. Zulovich. "Missouri Dairy Plan - The Missouri System of Dairy Production 500, 300, and 150-Cow Model." Commercial Agriculture Program University of Missouri-Columbia. CD-ROM. 10 October 2002.

Bhandary, R., G. Frank, R. Klemme, L. Tranel. "Grazing's potential: predicting expansion's cost, profit," University of Wisconsin-Madison, Center for Integrated Agricultural Systems. Internet site: <http://www.wisc.edu/cias/pubs/briefs/030.html> 18 March 2003.

Center for Integrated Agriculture Systems (CIAS). "Grazing project combines strength of on-farm research station studies." Res. Brief 12, Univ. of Wisconsin. 2001. Internet site: http://www.wisc.edu/cias/pubs/brief/012.html (Accessed July 31, 2002).

Dartt, B.A. and G.D. Schwab. "2001 Crops and Livestock Budgets Estimates for Michigan," Michigan State University, Department of Agricultural Economics. Internet site: <http://www.aec.msu.edu/agecon/aecreports/budgets01.htm> 27 January 2003.

Doane's Agricultural Report. "The Milk Income Contract program (MILC) faces an uncertain future," 68(January 7, 2005):1.

FAPRI. 2001. Agricultural Outlook. "U.S. Livestock and Dairy," Internet site: <http://www.fapri.org >12 February 2003.

FAPRI. 2001a. Agricultural Outlook. "U.S. Crops," Internet site: http://www.fapri.iastate. edu/Outlook2001/PageMker/ outlk2001US Crops.pdf 12 February 2003.

Federal Reserve Bank of Chicago. "AgLetter," Internet site: http://www.chicagofed.org/publications/agletter/2003/agfeb2003 .pdf 28 March 2003.

Groover, G. "Dairy Budgets," Virginia Cooperative Extension Farm Management, Virginia Tech University. Internet site: <http://www.ext.vtu.edu/departments/agecon/ spreadsheets/livestock/dairy. html> 15 January 2003.

Hamilton, S., R. Young, and G.B. Hurley. "Economics of Pasture-based Dairy Production," University of Missouri Extension, 2000. Internet Site: <http://agebb.missouri.edu/mgt/dairy.htm. > 22 August 2002.

Hanson, G.D., L.C. Cunningham, M.J. Morehart, and R.L. Parsons. "Profitability of Moderate Intensive Grazing of Dairy Cows in the Northeast." *Journal of Dairy Science* 81(1998):821-828.

Jones, R. and J.P. Murphy. "Livestock Building and Equipment Requirements," Kansas State University. Internet site: <http://www.oznet.ksu/library/agec2/mf940.pdf> 22 October 2002.

Kriegl, T. "Wisconsin Grazing Dairy Profitability Analysis-A Preliminary five Year Comparison of the Cost of Production of Selected Conventional and Grazing Wisconsin Dairy Farms." University of Wisconsin Center for Dairy Profitability. Internet site: < http://cdp.wisc.edu/pdf/costofprod5yrb.pdf>28 August 2002.

Moore, R. Dairy Enterprise Budgets. The Ohio State University. Internet site: < http://www-agecon.ag.ohiostate.edu/people/moore301/size/dairy-size.htm > 24 October 2002

Ohio Dairy Enterprise Budgets. "Feed requirement for a dairy cow and replacements (21,000 lb. Production)," Ohio State University Extension, p. 14, footnote 6. Internet site: <http://ohioline.osu.edu/b864/b864_22html> 12 November 2002.

Short, S. D. "Characteristics and Production Costs of U.S. Dairy Operations," USDA-ERS. Statistical Bulletin No. (SB974-6) 20 pp, February 2004.

Tauer, L.W. "Short-run and Long-run Efficiencies of New York Dairy Farms." Agricultural and Resource Economics Review 22(1993)1-9.

University of Illinois Urbana Champaign Farm Lab. "Enterprise Budgets for Illinois Farms." Internet site: <http://www.ace.uiuc.edu/farmlab/farmmgt.html>22 October 2002

University of Wisconsin-Madison. "Spreadsheet Model for Undertaking Farm-Level Analysis of MILC Program: Multiple Herd Size Evaluation," Available online at <http://www.aae.wisc.edu/future/default.htm> 15 March 2003.

United States Department of Agriculture-Farm Service Agency. "Milk Income Loss Contract Program, 2002" Internet Site: <http://www.fsa.usda.gov/pas/publications/facts/html/milcO2.htm> 29 March 2003.

United States Department of Agriculture-National Agricultural Statistical Service. "USDA Published Estimate Date Base-U.S. and State Level data: for dairy. Internet Site: http://www.nass.usda.gov:81/ipedb/ (Accessed November 20, 2004).

Table 1. Dairy Structure Comparison for Illinois, Wisconsin, California and U.S. for 2000

	Illinois	Wisconsin	California	U.S.
Dairy Farms (no.)	2,100	21,000	2,500	105,170
Share of U.S. Milk Production (%)	1	14	19	100
Average Herd Size (cows)	57	64	624	87
Dairy Farms with 500+ Cows (%)	0.2	0.7	44	3
Milk Production by 500+ Cows (%)	3	9	78	36
Milk Production per Cow (lbs)	17,450	17,306	21,169	18,201
Cost of Production ($/cwt)*	18.38	16.90	12.48	16.53

Source: USDA-NASS

** USDA-ERS 1999 Regional estimates North Central, Upper Midwest, Pacific and U.S.*

Table 2. Investment in Facilities and Equipment by System

Building and Equipment Costs for 600 cow concentrated system*	
Free stall barn	$630,0000
Feed storage:	
Hay barn	$31,680
Silage bunker	$184,748
Commodity shed	$35,258
Protein bin	$6,233
Milking parlor (20 stalls)	$302,000
Manure storage system	$228,000
Rolling equipment	$200,000
Miscellaneous	$40,000
Total	$1,657,919
*Based on Kansas State University Estimates Available online at http://www.oznet.ksu.edu/library/agec2/mf2441.pdf	
Building and Equipment Costs for 120 cow intensive grazing system**	
Buildings	$62,000
Bulk Tank (new)	$20,000
Skid Steer	$10,000
Milking parlor	$144,000
Lagoon	$15,000
Miscellaneous	$5,000
Total	$256,000
**Based on University of Wisconsin estimates Available online at http://www.wisc.edu/cias/pubs/briefs/030.html	
Building and Equipment Costs for 120 cow conventional system*	
Free stall barn	$120,000
Hay barn	$5,147
Silage bunker	$36,111
Commodity shed	$4,888
Protein bin	$1,060
Milking parlor (12 stalls)	$144,000
Manure Storage system	$40,000
Rolling Equi pment	$75,000
Miscellaneous	$10,000
Total	$436,206

**Based on Kansas State University Estimates Available online at http://www.oznet.ksu.edu/library/agec2/mf272.pdf*

Table 3. Capital Outlay Comparison for Alternative Dairy Systems

	Intensive grazing	Conventional	Concentrated
Land	$27,360	$27,360	$45,600
Livestock	$156,000	$156,000	$780,000
Milking parlor	$144,000	$144,000	$302,000
Barn and Feed Facilities	$62,000	$167,206	$887,919
Equipment and Machinery	$50,000	$125,000	$468,000
Total	$439,360	$619,566	$2,483,519
Total Investment per Cow	$3,661	$5,163	$4,139

Table 4. Cost and Return Comparison by Dairy System and Milk Yields

	Intensive Grazing		Conventional		Concentrated	
Milk Pounds per Cow	16000	17000	21000	24,000	21000	24,000
			$/cow			
Milk Sales	1911	2030	2508	2867	2508	2867
MILC Payments	176	190	228	201	35	35
Total Receipts	2359	2492	3008	3339	2815	3173
Feed Cost	819	838	1114	1264	1114	1264
Total Cost	1647	1666	2163	2314	2132	2282
Before-Tax Net Cash Flow (BTNCF)	712	826	844	1025	683	890
BTNCF without MILC Payments	535	636	616	824	648	856

Table 5. IRRs of Three Alternative Dairy Production Systems Using Section 179 Expensing

	Intensive grazing		Conventional		Concentrated	
Milk Yields	16000	17000	21000	24000	21000	24000
Rate of Return with MILC after taxes	9.30%	12.38%	7.69%	11.12%	4.97%	9.92%
Rate of Return with MILC before taxes	10.67%	14.71%	8.87%	13.41%	7.50%	14.17%
Rate of Return without MILC after taxes	3.86%	6.56%	3.34%	7.51%	4.13%	9.15%
Rate of Return without MILC before taxes	4.13%	7.91%	2.67%	8.34%	6.32%	13.08%

Table 6. IRR of Three Alternative Dairy Production Systems without Section 179 Expensing

	Intensive grazing		Conventional		Concentrated	
Milk Yields	16000	17000	21000	24000	21000	24000
Rate of Return with MILC after taxes	6.39%	9.43%	5.49%	8.92%	3.92%	8.97%
Rate of Return without MILC after taxes	0.94%	3.68%	1.01%	5.26%	3.07%	8.19%