

The Influence of Non-Resident Investment on Farm Land Prices
in Manitoba and Saskatchewan

by

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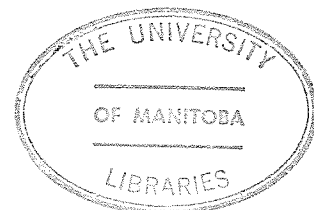
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ABSTRACT

A discussion of the effects of rising land prices establishes the hypothesized influence of non-resident investment on land prices as a problem. This thesis determines whether non-resident ownership of land has contributed to rising land prices specifically in Manitoba and Saskatchewan.

The theory underlying the demand for land is developed to form a hypothesis on the effect of non-resident investment on land prices. Private non-resident buyers shift the aggregate demand for land by increasing the number of buyers in the market, by paying relatively more for land than residents, and by influencing the expectations of other buyers and sellers in the market. Thus, private non-resident investment is hypothesized to increase land prices. Public investment in farm land, particularly in Saskatchewan, decreases the future number of land transactions. The presence of the Government increases the number of buyers. However, the overall effect public investment has on price is difficult to hypothesize because of the regulations under which the Land Bank operates. The Saskatchewan Land Bank Commission bases its purchase price of land on past comparable sales and therefore likely offers less than market value

for land in a rising market. Private buyers may be influenced by the prices the Saskatchewan Land Bank Commission pays for land. Therefore it is difficult to hypothesize the effect of public investment on land prices in a rising market.

Two models are specified and estimated by ordinary least squares from cross-sectional samples to test the hypotheses arising from the theory of land investment behaviour. The first model, which explains the variation in land prices between municipalities, determines the extent non-resident investment has affected land prices in Manitoba and Saskatchewan. The second model explains variations in prices between individual land transactions to determine whether non-residents have influenced demand for land by paying relatively more for land and by influencing the behaviour of resident buyers.

The results of the thesis confirm the hypothesis that private non-resident investment has influenced land prices by increasing the aggregate demand for farm land. The results establish aggregate demand has been affected not only by the increased number of buyers in the market, but also in some cases by the willingness of non-residents to pay higher prices for farm land. The results also establish that in the past, The Saskatchewan Land Bank Commission has

stabilized land prices by paying less than market value for land.

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TABLE OF CONTENTS

ABSTRACT	iv
ACKNOWLEDGEMENTS	vii

Chapter	page
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I. PROBLEM STATEMENT AND OBJECTIVES	1
The Influence of Non-Resident Buyers on Land Prices	1
Working Hypotheses with Respect to the Effect of Rising Land Prices	6
Effect of Rising Land Prices on Established Farmers and Entrants	6
Effect of Rising Land Prices on Land Tenure	7
Promotion of the Rental Option	7
Consequences of the Increase in the Rental of Land	8
Public Ownership	13
Effects of Rising Land Prices on Provincial Economy	15
Agricultural Productivity	15
Capital Flows	16
Distribution of Wealth	17
Provincial Government Legislation	17
Objectives of the Study	19
Organization of the Thesis	20
II. ECONOMIC THEORY AND RELATED STUDIES	21
Demand	21
Investment Decisions	21
Internal Rate of Return	21
Maximum Bid Price	26
Demand for Land as a Consumer Good	27
Influence of Non-Residents on Demand	28
Private Non-Residents	28
Public Investment	30
Supply of Farm Land	32
Disinvestment Decisions	33
Involuntary	33
Voluntary Sale	33
Influence of Non-Residents on Supply	34
Government Ownership	34
Private Non-Resident Ownership	35

Price Determining Relationships	35
Conditions for a Sale	35
Market Behaviour Over Time	36
Related Studies	37
III. MODEL SPECIFICATION AND DATA	47
Municipal Cross-section Model	47
Specification and Definition of Variables	47
The Role of the Independent Variables	49
Hypotheses to be Tested	53
Municipal Level Data	54
Farm Sales Cross-sectional Model	59
Specification and Definition of Variables	59
Role of the Independent Variables	60
Farm Level Data	62
Hypotheses to be Tested	69
Model Coefficients	69
Testing the Non-Resident Influence on Residents' Behaviour	69
A Comparison of the Two Separate Specifications	72
IV. RESULTS	74
Municipal Level Model	74
Manitoba - 1971 and 1976	74
Saskatchewan - 1976	90
Farm Sales Model	98
Interlake Farm Land Market	98
Western Manitoba Farm Land Market	101
Low Concentration of Non-Resident Sales	101
High Concentration of Non-Resident Sales	101
Pooled Resident Sales	102
Eastern Central Manitoba Farm Land Market	108
Low Concentration of Non-Resident Transactions	108
High Concentration of Non-Resident Sales	108
Pooled Resident Sales	109
Comparison of All Regions	115
Farm Sales Model Results	115
Results of F-Test	118
Summary of Results	118
V. SUMMARY, LIMITATIONS, AND IMPLICATIONS OF RESULTS	121
Summary of Empirical Results	121
Limitations of Results	123
Implications of Study for Provincial Government Policy	125

Appendix	page
A. NON-RESIDENT OWNERSHIP LEVELS BY MUNICIPALITY	128
B. MAPS OF NON-RESIDENT LEVELS	138
C. FARM LEVEL MODEL SAMPLE MAP	142
D. PROVINCIAL ACTS	144
THE SASKATCHEWAN FARM OWNERSHIP ACT (R.S.S. 1978)	144
THE AGRICULTURAL LANDS PROTECTION ACT. (September, 1978)	158
 BIBLIOGRAPHY	 171

LIST OF TABLES

Table	page
1. Land Tenure in Manitoba and Saskatchewan	2
2. Land Investments	23
3. MANITOBA REGRESSION RESULTS	83
4. MANITOBA REGRESSION RESULTS	84
5. MANITOBA MEANS AND STANDARD DEVIATIONS	85
6. MANITOBA 1971 CORRELATION MATRIX	86
7. MANITOBA 1976 CORRELATION MATRIX	87
8. Saskatchewan Regression Results	94
9. Saskatchewan Means and Standard Deviations	95
10. Saskatchewan Correlation Matrix	96
11. INTERLAKE REGION High Non-Resident Level Regression Results	99
12. INTERLAKE REGION High Non-Resident Level Sample Statistics	100
13. WESTERN REGION Low Non-Resident Level Regression Results	104
14. WESTERN REGION Low Non-Resident Level Sample Statistics	105
15. WESTERN REGION High Non-Resident Level Regression Results	106
16. WESTERN REGION High Non-Resident Level Sample Statistics	107
17. EASTERN CENTRAL REGION Low Non-Resident Level Regression Results	111
18. EASTERN CENTRAL REGION Low Non-Resident Level Sample Statistics	112

19.	EASTERN_CENTRAL REGION High Non-Resident Level Regression Results	113
20.	EASTERN_CENTRAL REGION High Non-Resident Level Sample Statistics	114

LIST OF FIGURES

Figure		page
1.	Intensity of Production	11
2.	Individual's Demand for Farm Land	23
3.	Manitoba 1971 - Map of Residuals	88
4.	Manitoba 1976 - Map of Residuals	89
5.	Saskatchewan - Map of Residuals	97

Chapter I

PROBLEM STATEMENT AND OBJECTIVES

1.1 THE INFLUENCE OF NON-RESIDENT BUYERS ON LAND PRICES

Economists and participants in the farm real estate market often use the words 'land price' and 'land value' interchangeably. Assuming the market price of farm land is determined by many well informed buyers and sellers, it represents the most objective indicator of value. In the Prairie provinces the past movement of land prices is linked closely to net returns per acre and terms of credit. An increase in net receipts or a decrease in the mortgage rate usually is followed by an increase in land prices.¹ Another factor was present in the farm real estate scene during the 1970's. Data collected for this thesis indicates that non-residents² owned 1,157,000 acres of farm land in 1971 and 1,838,000 acres in 1977 in Manitoba. (See Table 1)

¹Kraft, D.F., What's Land Worth Now?, Occasional Series 6, Department of Agricultural Economics, University of Manitoba, (December 1974).

²In this thesis a non-resident Manitoba landowner is defined as a farm land owner not residing in the rural community. For Saskatchewan, a non-resident is defined as a farm land owner not residing in Saskatchewan.

TABLE 1

Land Tenure in Manitoba and Saskatchewan

(1,000's of acres)

	1971	1977	Change In Acres	Percent Change
<u>MANITOBA</u>				
Land owned and operated by farmers	14,063	13,591	472	-3.4
Land rented by farmers	4,945	5,436	491	10.0
(a) Provincial Crown Lease	1,739	1,799	60	3.5
(b) MACC	0	141	141	-
(c) Non-rural residents	1,157	1,838	681	58.8
(d) PFRA and rural residents	2,049	1,658	-391	-19.1
<u>SASKATCHEWAN</u>				
Land owned and operated by farmers	46,112	45,211	-901	-2.0
Land rented by farmers	18,945	20,290	1,345	7.1
(a) Provincial Crown Lease	8,300	8,500	200	2.4
(b) Land Bank	0	800	800	-
(c) Non-residents of Saskatchewan	635	1,636	1,101	173.0
(d) PFRA and residents of Saskatchewan	10,010	9,354	-656	-6.6

Source: 1976 Census of Canada Agriculture, Manitoba, Saskatchewan, Catalog Number 96-807. In Search of a Land Policy for Manitoba - A Working Paper prepared by the Manitoba Department of Agriculture, 1975. Agricultural Crown Lands Section Annual Reports, 1976-77 and 1971-72. Manitoba Department of Agriculture. Saskatchewan Farm Ownership Board, Saskatoon, Saskatchewan. Saskatchewan Land Bank, Regina, Saskatchewan.

Land prices in Manitoba rose from an average of \$83 per acre in 1971 to about \$172 per acre in 1977.³ Non-residents of Saskatchewan owned about 635,000 acres in 1971 and 1,636,000 acres in 1977 of Saskatchewan farm land. The average price of land in Saskatchewan rose from about \$69 per acre in 1971 to \$166 per acre in 1977.⁴ The purpose of this thesis is to examine whether this correlation between land prices and non-resident ownership is spurious.

A previous study by the Manitoba Department of Agriculture concludes non-residents are willing to pay more for farm land. This conclusion is supported by sales data that show, "For the province as a whole, the sworn value of the lands purchased by local residents was 3.41 times the assessment, while the value of the land purchased by non-residents was 3.94 times the assessed value."⁵ However, these multiples may not be statistically different because of the great variability in price between transactions. As well, this analysis is questionable because it does not take into account factors influencing land prices such as location and parcel size. For example, the non-residents may have pur-

³1977 Yearbook Manitoba Agriculture, Manitoba Department of Agriculture, Province of Manitoba.

⁴Agricultural Statistics Spring 1978, Statistics Branch, Saskatchewan Agriculture.

⁵Manitoba Department of Agriculture, In Search of a Land Policy for Manitoba, Queen's Printer, Province of Manitoba, 1974.

chased land close to urban centres. If the inclusion of these factors would not significantly affect the results, the conclusion that non-residents are willing to pay more for farm land implies that non-residents can affect the aggregate demand for land and thus the price.

Non-residents do not have to be willing to pay more for land to affect land prices. Assuming the market was composed of residents of the province, the introduction of non-resident buyers causes a shift in aggregate demand. However, the more the non-residents are willing to pay, the more they shift the aggregate demand.

Non-residents further influence the land market if their purchasing affects the decisions of provincial residents. The presence of non-residents offering higher prices may persuade resident farmers the land is worth more (either in agriculture or in other uses) than the farmers believed it to be worth. Higher prices may induce potential sellers to raise their asking price. Thus, non-resident buyers may influence land prices by raising the expectations of both local buyers and local sellers.

The effect of public investment in farm land must be analysed apart from the effect of private non-resident investment. Whether government investment influences land

prices depends on the extent of the investment and the purchasing policies of the government. Land banks in Manitoba and Saskatchewan have not actively competed in the land market by outbidding other buyers. Government land is acquired from vendors who apply to sell their land to the land bank. Manitoba and Saskatchewan land banks have attempted to purchase land at market value by establishing a purchase price based on comparable sales. The government has become an additional buyer in the market and therefore has affected demand. However, the government is not willing to outbid other buyers for land like private non-resident buyers who may be willing to pay more than current market value. Public land banking may also affect demand by influencing the opinions of buyers and sellers regarding current land values.

In addition to affecting demand, public investment can influence land prices in the long run by affecting the supply of land. Public ownership of land is generally on a longer term basis than private ownership. Therefore, current public investments are likely to decrease the future flow of farm land and could influence future land prices.

Thus, the concern of this thesis is an hypothesized correlation between farm land prices and non-resident ownership of farm land.

1.2 WORKING HYPOTHESES WITH RESPECT TO THE EFFECT OF RISING LAND PRICES

The effects of rising land prices are outlined in this section of the problem statement to justify the concern regarding the hypothesized correlation between land prices and non-resident ownership. These hypotheses are based on the theory of farm investment decisions developed in Chapter II.

1.2.1 Effect of Rising Land Prices on Established Farmers and Entrants

The net worth and therefore the collateral of an established farmer increases when land values rise. Such a farmer wishing to expand his operation has increased borrowing capacity for expansion of his land base. Although the farmer has increased borrowing capacity, the price of land may still exceed the farmer's maximum bid price. In this case, the farmer will increase his use of fertilizer, herbicides, and pesticides if the projected return from this increased intensity of production is greater than the return from purchasing an additional parcel of land. The farmer may choose to use his increased borrowing capacity to secure capital for land improvements such as drainage, clearing, irrigation, farm building or livestock expansion. As the price of land rises, the rate of return of alternate investments will at some point exceed the rate of return of investment in additional land.

For a beginning farmer who has no collateral in land, an increased land price serves to increase the downpayment required for land purchases as well as the annual mortgage payments. Consequently, the ability of beginning farmers to compete in the land market decreases as land prices rise.

Because the beginning farmer is forced to borrow more money for the same amount of land, a higher proportion of the farmer's total borrowing capability must go towards land. It becomes more difficult for the entrant to obtain credit for the purchase of farm machinery, buildings, and livestock. A land price increase reduces the upper limit on a line of operating credit, forcing the entrant to utilize a low level of operating inputs per acre. The financial position caused by rising land prices can make an entrant averse to growing riskier, but more valuable crops.

1.2.2 Effect of Rising Land Prices on Land Tenure

1.2.2.1 Promotion of the Rental Option

Because of the aforementioned problems caused by rising land prices, land price increases result in entrants seeking rental lands. In the article, Should I Own or Rent Farm Resources?, W.J. Craddock⁶ remarks that "Rentals may be the only means by which a viable scale of operation can be -----"

⁶Craddock, W.J. Should I Own or Rent Farm Resources? Occasional Series 6, Department of Agricultural Economics, University of Manitoba, (December 1974).

achieved." If the entrant rents land, his annual payments are lower and he needs no equity for a downpayment. The entrant's capital is then free for the purchase of farm machinery and for expenditures on operating inputs. With rental of land, an entrant is able to achieve economies of size faster than if the the entrant had purchased land at the increased price.

If the demand for rental lands increases at a greater rate than the supply of rental lands, then leasing costs should increase. For an entrant farmer, if annual rent payments are equal to annual mortgage payments, the rental option is still more desirable in the short run because no downpayment is required. In the long run, however, the great demand for rental lands from entrants may drive up the rent to such an extent that the rental option is no longer more attractive than purchasing land. This is not the case with government rental land if the rent charged is independent of the land rental market and leases can not be bought and sold. Thus, in the long run, non-transferable leases with the government may remain a more attractive option than purchasing land.

1.2.2.2 Consequences of the Increase in the Rental of Land

Non-resident ownership of land, whether public or private, is criticized by those who believe efficiency can best

be achieved by the owner operator. The tenure system is criticized on the basis of lack of incentive and inefficient resource use. Economic theory suggests that the owner operator system promotes a more efficient use of resources than do certain types of rental arrangements. Empirical studies of the effect of tenure types on resource efficiency have shown that the owner operator system can generate higher net returns.⁷ The net returns of a farm operated through a landlord tenant relationship may differ from the net returns of an owner operated farm because the landlord and tenant have different marginal revenue relationships. "The motives of landlords and tenants diverge - the landlord expects to use the tenant's labour and capital while the tenant expects to cultivate the land extensively."⁸ This statement is relevant for a share crop situation.

Assume an owner-operator or a tenant (operating on a 2/3 share crop situation) has a certain fixed acreage to farm. Assume the tenant or the owner operator are responsible for the other inputs - fertilizer, for example. The owner operator equates the marginal product of fertilizer to the ratio of the price of fertilizer and the price of the crop, that

⁷Langemeier, L.M., Effect of Tenure Relationships on Resource Efficiency, Canadian Journal of Agricultural Economics, Volume 18, Number 2, (July 1970).

⁸Andarawewa, A.B., Tenure Patterns and the Commercialization of Canadian Agriculture, Canadian Journal of Agricultural Economics, Volume 17, Number 1, (February 1969).