INVESTMENT ON THE RURAL SCENE

by

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Paper presented to
The New Zealand Institute of Valuers' Seminar,
Massey University,
16-17 May, 1974
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"Investment" is a word which has different meanings for different people, so presumably the title I was given for this paper gives me scope to talk about any aspect of rural investment that I choose, but obviously a group of valuers such as yourselves will be chiefly interested in investment of one sort or another in land. Even restricting the discussion chiefly to land, however, still leaves me with a wide range of topics. An economist usually looks upon investment as the creation of new assets in the economy, the purchase of a new machine from a local or overseas producer, or the commissioning of a new building, road or bridge. From the point of view of the whole nation, investment of this sort means an addition to the total assets of the economy. An individual, however, can increase his possessions either by creating new assets or by acquiring property from others. This latter form of individual investment represents, from the national view, simply the transfer of the ownership of assets rather than investment.

On the rural scene, the difference between these two forms of investment is very obvious. The purchase of a farm, which represents a major investment for most of the individuals who undertake this exercise, merely transfers an asset from one owner to another, and unless there is a significant change in the efficiency with which the land is farmed after the transfer, there will be little change in production. On the other hand, investment in improving land - clearing, drainage, cultivation, fencing, topdressing - generally raises the productive capacity of land by increasing the asset which is to be devoted to agricultural production. Valuers are normally involved in the asset transfer type of activity, whilst Government policies designed to boost farm development, and hence production, are concerned mainly with increasing the quantity of assets devoted to agricultural production. Of course Government
or Local Body policies designed to affect land use will generate reactions in investors' attitudes to particular blocks of land.

Available figures relating to capital expenditure on farms do not go back for many years, but when we compare those that are available with the total consideration involved in the transfer of rural freehold and leasehold properties, as in Table I, we see that the value of capital expenditure is considerably less than the sums involved in property transfers. This is probably to be expected, but bear in mind the fact that the capital expenditure Table I figures refer to all surveyed farms, whilst the farms transferred represent no more than about five per cent of the true farm land in every year.

The two types of expenditure, transfer and true investment, are obviously related; many farmers desiring to increase the size of their farming operation will have a choice between the purchase of additional land or the further development of what they already have, and the expansion path chosen will normally be determined by the relative costs of the two courses of action. Nevertheless it is possible to examine aspects of each type of expenditure in isolation, and I want to turn now to an examination of some of the possible determinants of the level of expenditure on rural land.

Farm Purchases.

The first question we must ask ourselves is, "Why do people buy farms?" Why do people tie up very considerable sums of money in blocks of rural land, some of which may not be particularly suitable for farming? Apart from city dwellers seeking weekend hideaways in the hills, or people such as some town workers and retired farmers, who use a block of rural land as a substitute for a town section, the answer must surely be that land is bought as a personal investment, from which some monetary gain can be expected in the future. The expected monetary gain will probably
3.

fall into one or more of three main categories. First there is the current income to be earned by farming the land: despite occasional rumours to the contrary this is sometimes a profitable exercise, but, as I shall point out in a minute, the current net income earned from farming usually represents a smaller return on the assets committed than could be earned in many other forms of investment.

The second category of monetary gain to be made from the ownership of land comes in the form of the capital gain to be made from the fact that, in general, land prices tend to move ever onwards and upwards. In the decade 1963 to 1973 (years ended March) the Government Statistician's figure for the weighted average price per acre of freehold rural properties sold showed an increase of almost 77 per cent. For all the deficiencies of this measure when used as an index of the price of rural land, it is obvious that there have been substantial increases in rural land prices. Over approximately the same period, calendar year 1962 to 1972, the index of the market prices of company shares in New Zealand rose by only 56 per cent. Comparisons of this sort are liable to be affected by the choice of particular beginning or ending years, and I have just taken the latest available decade, but there is another factor in favour of land investment and that is the resistance to downward movements. In the last decade there were only two years when the average rural land prices fell; they were successive years and the total fall was less than two per cent. Share prices, on the other hand, fell in four of the ten years, and in one two-year period the total fall was more than 17 per cent. Land sales tend to dry up in poorer years (for example, the number of transactions fell by over 20 per cent between 1966 and 1969), and this means that a land owner who wants to quit his property in a poor year is not faced with a host of other, more than willing, sellers, as may be the case in the share market.

In addition, of course, there is the very important fact that the buyer of real estate can obtain very much more leverage than the share-market investor, and the gain on the investor's own
capital will therefore be greater in land than in shares for a given increase in the value of the total asset.

Thus, with apparently greater capital gains, and greater protection from capital loss, the record of the last decade suggests that rural land is probably a better investment for the seeker after capital gains than is the share market. One point that I should make here is that the increase in land values that has been recorded is not all capital gain; some proportion of it is due to the investment in improvements that has taken place over the period.

The third category of farm purchases that I see is best described as land bought as a medium for true investment of the asset increasing type. That may sound complicated, but I mean that if you want to make true farm investments you have to have a piece of land to make them on. This is particularly apparent with capital intensive operations such as poultry farming, pig fattening, feed-lotting, mushroom farming and glass-house operations. In all these enterprises, the value of the land used tends to be a relatively small part of the total capital involved, and the operators are therefore often willing to pay prices for their land that others regard as exorbitant. The point I want to make at the moment, however, is that they have to acquire some land on which to make their major investment in buildings or facilities. The cases I have quoted are extreme, but the principle has application on ordinary farms as well. Numerous farm management case studies exist showing returns to various forms of investment on farms of well over 20 per cent. Anyone who wants to make this sort of investment has to have land to which he can apply additional capital. Once very high returns from a particular form of development expenditure become generally recognised in the farming community, the potential for making these returns tends to become at least partly capitalised into land values, so perhaps some of the farmers making this type of purchase are after a capital gain which may be more assured than usual.
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So there we have it: three major commercial reasons for the purchase of rural land, the earning of a current income, the hope of a capital gain, or the acquisition of a piece of land in which to make substantial investment. How well have these aims of investment been realised? Precise figures on the rate of return on farm capital do not exist on a national basis, and the estimates that have been made from time to time for various sections of the farming industry involve fairly heroic assumptions about the labour reward of owner-operators and so on. Nevertheless, the estimates that are available, together with numerous individual case-studies, suggest that the return on the current value of the capital invested in most farm enterprises would average about 4½ to 5 per cent over the years, with a range extending from about 2 to 7 per cent. The average rate of interest on all mortgages for the year ended March 1960 was 5.01 per cent; for the year ended March 1973 it was 7.58 per cent. If lending by the Government, which includes 3 per cent housing loans, is excluded, the rate for the March 1973 year rises to more than 8 per cent. Thus it is fairly obvious that the average purchaser of farm land is not seeking after the highest possible current return on his capital. Either he is so attracted to farming as a way of life that he is prepared to sacrifice part of the potential return on his asset, or he expects that for some reason or other the income generated on the farm will be higher in years to come. It would probably be true to say that most farm buyers believe that they will be able to farm the property better than the previous owner, but the low current returns achieved can hardly be ascribed to the wholesale failure of farmers to achieve the production they expected. It seems to me to be much more likely that buyers expect the income produced from a farm to show a general upward trend over the years, either because of continuing technical advances, which enable the volume of production to be stepped up year by year, or because of favourable price movements. Whether it results from favourable changes in technology or prices, an increase in income will soon be capitalised into the value of the property, and so may be considered under the heading of capital gains.
From another point of view, however, that of the farmer who buys a property with the aim of staying on it, and farming to the best of his ability, the expected income growth will mean, over the years, a higher and higher return to him on his original investment. Thus in the year of purchase the current return will probably be considerably less than the return that could be gained from mortgage lending, but the expectation is that this return will be comfortably exceeded within a few years, if the later farm income is expressed as a return to the original investment, which is of course the correct procedure to be followed when the alternative form of investment is lending on mortgage. The person buying with this sort of income aim in view may or may not count his annual capital gain as part of his annual return, but he will certainly expect to collect it when he finally sells his farm.

The buyer whose main aim is to obtain the maximum possible capital gain either shares the same favourable views on future movements in technology and prices described earlier, or he buys where he expects some future change in the use of the land from farming to, say, urban or tourist use. How valid is the expectation of continued technological advance, or higher farm product prices? Dr J. D. Stewart, who recently relinquished the Chair of Farm Management at Lincoln College on his appointment as Principal, has often spoken of the succession of technical advances which have occurred in New Zealand agriculture in the last thirty years, and which have been responsible for so much of the increased output which has been achieved in that time. Among these technical changes we would have to include such things as aerial top-dressing, herringbone cowsheds, new weedicides and pesticides, new crop and pasture plants and the development of new management techniques with respect to light land, heavy stocking rates, and so on. Some of these changes in technology have had spectacular effects on land values in certain areas which have received particular benefit, such as the light land areas of Canterbury.
Technological advances will continue, but technological forecasting is a very uncertain business, and we cannot tell at this stage when the next significant advance will come, which type of land will benefit most, nor just how significant it will be. What we do know is that the last few years have not been blessed with any spectacular breakthrough, but whether this means that the next advance is about due to burst upon us, or that we are going through a quiet period in which there will be no major changes for some time, is anyone's guess. Nevertheless, right at the moment, it does seem to me that banking on continual progress at the rates seen in the 1950s and 1960s is a bit like saying that what goes up must go on going up. Capital gains do not occur for ever on their own; there must eventually be some justification in either higher productivity or higher product prices.

If I am not all that confident about a quick and substantial resumption of our rate of technical advance, what about product prices? This is an area I usually prefer to leave to braver (or more foolhardy) souls, but I obviously cannot avoid some comment at this stage. There seems to be no doubt that economic growth in the industrial world is going to be much slower in the next few years than we have seen in the recent past, and, as usual, we will react to changes in our major markets. The difference between this and other post-war recessions is that this time prices generally are likely to go on rising, and the prices of most of our exports will stay at what appear to us now to be fairly satisfactory levels. In other words, a decline in the terms of trade is most likely to come through a sharp increase in import prices, rather than from a fall in export prices as in 1967. The effect on real incomes will be the same as before, but the effect on land prices will be quite different, because land is bought and sold in money, not real, terms. In addition, a cut in real incomes imposed by higher import prices is distributed throughout the economy from the outset, as opposed to the much greater initial shock felt by the exporting
industries when the reduction in real incomes is the result of falling export prices. In an inflationary slump, net farm incomes, especially in money terms, will suffer less from a given deterioration in the terms of trade; debt servicing capacity will not be hit so hard, and land values are more likely to be maintained.

The desirability of land purchase to provide a medium for true investment, in the economist's sense, is probably best evaluated in the light of the discussion on asset increasing activities, to which I shall turn in a moment, so where have we got to at this stage? Whether land is being bought for its current income producing capability, or its potential for capital growth, decisions on the desirability of purchase are likely to be based on expectations of growth in the future stream of monetary benefits to be obtained from the land in question. This is hardly a shattering conclusion, but it is worth noting that this applies whether income or capital growth is the aim.

Expectations of one sort or another will always play a major role in any investment decisions, but despite the apparently almost immutable upward movement in rural land prices, the decision to buy a farm is based on expectations in two particularly uncertain areas, the future rate of change in technology and export prices. It is true that technological change is hardly likely to be going backwards, except in such isolated cases as the banning of DDT, but export prices are notoriously volatile and difficult to predict. Important as they are, however, expectations are not the only determinant of land prices. It is one thing to hold certain expectations, even to hold them strongly, but it is quite another thing to exploit them to maximum advantage. "Money makes money" is a very old and very true saying. The certain knowledge that land prices are about to rise will be of little use to you if you cannot raise the resources with which to buy land and take advantage of your superior knowledge. Thus expectations can be seen as
determining the desire to purchase land, whilst the possibility of acting upon expectations will be limited by the availability of financial resources.

As far as urban house properties are concerned it is easy to demonstrate a relationship between finance available and prices paid. In this case expectations are much less uncertain; everyone is practically certain that the costs of building will go on rising, and as long as the population goes on increasing there will be a demand for more and more housing. The only doubt remaining concerns the rate at which house prices will rise. In this situation everyone wants to get a house at the earliest opportunity; if he can obtain loan finance the average individual will be willing, and well advised, to mortgage himself to the limit of his debt-servicing capacity. The result is the close relationship between annual percentage changes in urban house properties, and the community's total liquid financial resources, which is depicted in Figure I. The correlation is not perfect; in the gloomy days of 1968, for example, urban property values did not respond immediately to the increase in the money supply which resulted from the balance of payments surplus following devaluation. Nevertheless, it is obvious that there is a close relationship between the two series, and the property price increases of the last two years can be largely explained in these terms.

When we come to rural purchases, however, the picture is not nearly so clear or simple, because we have a set of uncertain and possibly rapidly changing expectations replacing the relatively stable set applying to urban transactions. The relationship between the Valuation Department's Farm Land Price Index, and the money supply, is depicted in Figure II. I think we can claim that there is a relationship, but with changing expectations playing such an important role we could hardly expect the connection to be as close as in the urban sector. Unfortunately we cannot measure expectations directly, and although relationships have been
observed at different times between rural land values and a number of variables which have been taken as measures of expectations, these relationships have not continued to hold good up to the present time. For example, a correlation has been demonstrated between farm land prices and export prices, but when farmers' expectations of internal inflation began to change, the correlation disappeared. Farm income figures are available too late to be of any assistance in helping to assess likely trends in land prices, and, in any event, the form in which the estimates of aggregate figures are usually published excludes rent and interest payments which would be better included when the income estimate is to be used to explain land prices. Of course, most of you, as valuers, will be interested in particular types of farms, rather than in the theory of the market value of the land asset in New Zealand, and the expectations of different types of farmers may be changing in different ways at the same time. The greatly increased volume of information published in recent years by the Valuation Department makes possible a fairly detailed analysis of the changes in prices of different types of farms, and this has been done in the Department's publication Rural Real Estate Market in New Zealand 1950-1969. The discussion in that publication, however, is aimed very heavily at export prices and prospects, which is why I have tried to emphasise the importance of internal financial conditions.

Two final points before I leave this section. The first is that for the last few years, at least, it is easy to demonstrate a connection between the rate of growth of the money supply, and the size of the surplus or deficit on our overseas exchange transactions. This is to be expected in the absence of counter measures by the authorities, but in the light of the relationships I have been discussing it has two implications. The first is that last year's property boom should have been foreseen, and that monetary measures would probably have been the best way to deal with it. The second is that to the extent that the balance on our overseas transactions
reflects high or low export prices for our primary products, the relationship between money supply and rural land prices may reflect some expectations based on current export prices.

The second major point is that Government action designed to make funds available specifically for farm purchases is likely to raise farm land prices above what they would otherwise have been, for any given level of total money supply, as this increases the total resources available for farm purchases much more directly than an increase in total funds, for which other potential users will be competing as well. Thus an allocation of funds to help young farmers acquire land will help those who get a share of these funds, but will make the task of other aspiring farmers even more difficult than before.

Capital Expenditure on Farms.

We turn now to an examination of investment in farming in the sense of asset increasing capital expenditure.

The motivations for making such expenditure will be much the same as the first two I described for farm purchase: the expectation of future monetary rewards to be gained from the expenditures, and the availability of resources to undertake the investment. Because of the development potential which has yet to be tapped on many of our farms, the current returns to be made from some forms of on-farm investment greatly exceed the current returns usually derived from farm purchase, and this is to be expected for other reasons as well. Apart from the effects of taxation policies, which I shall touch upon in a moment, there are fewer capital gains to be made from improvements than from land; improvements are apt to have a value related to their replacement cost, and they will therefore rise in line with inflation but little more. In addition, since many improvements are specific to a particular type of farming, they are much less flexible in their use than is the land on which they are situated, and the risk of loss because of a general move out of a particular type of farming
is therefore considerably greater. Lower capital gains, and a greater risk of capital loss, both imply that the current returns from this type of investment would have to be higher than those for land purchase if the investment were to be undertaken at all.

I mentioned taxation policies a moment ago, and these can play a very important role in the field of investment expenditures on farms, both because of their effects on estimates of current returns, and because they greatly increase the chance of making significant capital gains.

If an item of capital expenditure is tax deductible, then the investor who is paying tax at the highest rate finds that the Government, in effect, pays half his capital costs for him, and the effective rate of return on the investment is thereby doubled. It is sometimes argued that since the Government will collect half the resultant increase in income in the form of taxation, it is only right that they should pay half the capital costs, but this argument could be equally well applied to a whole range of investment alternatives. The reasons for special treatment for farm investment are that the nation has a particular need for increased farm output; investment is one way of stimulating this output, but farm investment has been rather low for a number of years; and several other Government policies, such as import controls, have tended to discriminate against the farming industry.

I don't think there is any need for me to justify the need for increased farm output to this audience, and the dramatic fall in on-farm investment after 1965-66, as shown in Table I, provides ample evidence that some additional incentive was required.

Granted that the Government has good reason for wanting to give farm investment a boost, it is legitimate to ask whether tax exemptions provide the best means for providing that boost. Taxation exemptions have the not inconsiderable advantage that they are probably the easiest form of aid to administer, but they have some drawbacks as well. In terms of achieving the object of greater
investment the most obvious deficiency of the exemptions is that they lose a lot of their impact just when they are needed most. That is, when farm incomes fall, confidence is at a low ebb, and farm investment is most in need of some government help, many farmers find that their marginal rate of tax has fallen below fifty per cent, with the result that the tax saved by any given investment is reduced. If the Wholesale Price Index is taken as a measure of the costs of capital expenditure on farms, then, in 1965-66 prices capital expenditure in 1969-70 was only $88 mn., and in 1970-71 it was $92 mn., just two-thirds of the level in 1965-66. Even in current prices, capital expenditure in recent years has been well below the $140 mn., per annum recommended by the Agriculture Committee of the National Development Conference, and the failure of the farming industry to record any substantial growth in output since 1965 suggests that investment has indeed been below the required level. 

One of the effects of tax exemptions as a major form of aid for farming has been to increase the attractiveness of farm purchase as a medium for investment, and one suspects that there would not be quite so many business men interested in farming of the exemptions were withdrawn. Valuation Department statistics suggest that about five per cent of farm buyers in 1971 and 1972 were business men. Opinions will vary as to whether this is a large or small figure, but I am sure it would be smaller without the help of the tax exemptions. Business men see the advantages of the higher net returns on their own expenditure on tax deductible capital items, and there is the chance for capital gain if the improvements added to a farm increase the value of the property by more than the fifty per cent of their cost that the investor has directly paid.

I am sometimes asked if this entry into farming by business men is a good thing. I certainly don't know the answer to that question, but perhaps it is worth looking at the pros and cons. Investment in the farming industry by business men is likely to increase the total flow of resources into farming, and since investment
has been too low this must be a good thing. Presumably managers will be employed to run the farms acquired by business men, and this will provide opportunities for keen and competent young farmers who cannot afford their own farms. On the other hand, the increased competition in the market for land will make it harder for the landless young farmer to get started on his own account. The total resources in the farming industry will be increased, but will they be more or less efficiently used than if they had been controlled by an owner-operator? The effect of ownership structure on the efficiency of resource use has not been very intensively studied in New Zealand, so I suppose we just have to remain ignorant on this point at the moment. Overall, I think the present level of interest by business men is probably healthy. Some prominent and influential business leaders are encouraged to become familiar with the problems of farmers, and the flow of funds out of agriculture is reversed. It has been quite noticeable that with the recovery of farm incomes in the last two years, many farmers have chosen to invest their savings outside the industry, particularly in urban property, with the aim of providing themselves with a cushion against some future fall in farm incomes. This might be a sensible move for individual farmers, but it has meant a flow of funds out of the industry after a period of depressed capital expenditure, and a reverse flow from business men is to be welcomed on that account.

One final point on tax exemptions concerns the extent to which they operate on the basis of "To them who hath shall be given!". They are of greatest benefit to those whose incomes put them on the maximum rate of tax and who have land on which to make worthwhile investments; they are of no use at all to those who have not yet accumulated sufficient funds to acquire a farm, or to those in the early stages of a development programme whose current income is so low that potential tax savings are negligible. There is a moral question involved in a system which virtually makes capital grants to those who already have capital, but withholds them from those without capital. The implications of this system might be easier to accept, if tax deductions for various classes of investment were
accompanied by a capital gains tax on the profit realised upon sale of the asset. Under this system the State would, in effect, lend an investor part of the purchase price of the approved asset, interest free, for the period in which he retained the asset.

Mention of a capital gains tax, of course, raises all sorts of questions of interest to valuers. The first obviously is, what would such a tax do to values? This is a topic for considerable speculation, because there would be different forces at work. Demand for land from those seeking capital gains might be reduced, but supply would fall somewhat as well. The statistics show an upsurge in sales when prices rise; a reduction in the receipts of the vendor because of the proportion of the sale price going to the Government would probably have the opposite effect. On the other hand, a tax which was seen as permanent might have a different effect on supply from a downturn in prices which is assumed to be temporary. In this connection I would be interested to see statistics on the ages of vendors and buyers of farms, because they would provide some information on the extent to which older farmers are enticed out of the industry by the prospect of a good price for their farms.

If a capital gains tax were introduced to perform the role of preserving equity within society between owners of capital and non-capital owners, in association with tax deductions as investment incentives, it would be necessary to ensure that the incentives were not significantly reduced. Thus it would be desirable to separate out the proportions of the total increase in value of a farm which were attributable to capital expenditure from the vendor's own pocket, to expenditure by the State in the form of tax deductions, to general inflation in land values, or to inflation in the replacement costs of the improvements on the land. The main aim should be to ensure that the real value of invested capital was at least maintained, even if the tax could be allowed to nibble at the real value of the capital invested in land in an effort to take some of the joys out of inflation.

A separation of the component parts of the value increase would allow differential taxes to be applied to each portion of the
increase in total value, so as to minimise the disincentives to investment. Such a system would obviously become a valuer's nightmare, however, as the burden of the complexity of the system would be added to by pressure on the valuer to allocate gains to low tax causes.

Perhaps it is not possible to combine the aims of incentive and equity by adding to our present scheme of tax deductions; possibly we need to start from scratch with a combination of capital grants and capital gains taxes. If a system of capital grants were instituted, under which the Government contributed towards the cost of approved capital expenditures, the degree of incentive would be the same for all investors regardless of their marginal rates of tax, thus giving equity between all groups of farm investors. The Government share of the total cost could be varied according to the state of the farming industry, in order to maintain investment in periods of low confidence, and possibly to restrain capital spending in periods of booming confidence. A scheme of this sort, operating over the last seven years, and keeping capital spending at a higher level up until 1972, would probably have had two desirable effects. Farm output would have been higher, allowing us to take greater advantage of the higher product prices when they arrived, and, following the higher prices, there would have been less of an upsurge in investment spending, thus reducing the shortages of investment goods which appeared last year. A relatively straightforward capital gains tax, while not ideal from the equity point of view, should be sufficient to produce reasonable equity between farming and the other sectors of the economy.

Having introduced the hot potato of capital gains taxes, it is perhaps time for me to drop it before I burn my fingers. Before I conclude, however, let me help the discussion along by reminding you of the main points I have made.
Summary.

I began by distinguishing between investment from the individual and national viewpoints; purchase of existing assets is investment only for the individual whilst the creation of new assets is investment for both the individual and the nation.

I discussed the reasons why investors buy rural properties; expectations and the wherewithal to act upon them. Expectations involve technical change and product prices or net incomes, both of which I commented upon, and the wherewithal will be dependent upon aggregate money supply and the buyer's own resources.

Capital expenditure on farms, on which we will be dependent for a large proportion of future increases in output if technical progress slows down, generally gives higher current returns than farm purchase. Nevertheless the level of capital expenditure on farms was too low in the years after 1967-68, and I discussed the tax deduction scheme designed to stimulate investment, together with an alternative which would give greater equity within the farming industry, and between farmers and the rest of the community.

And now, I hope that the fact that I have finished on a harmonious note of fair play for all will not inhibit a vigorous discussion.
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<th>(2) Total Capital Expenditure on Farms $mn</th>
<th>(3) Expenditure on Buildings, Improvements &amp; Developments $mn</th>
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**Source:** MONTHLY ABSTRACT OF STATISTICS and NEW ZEALAND OFFICIAL YEARBOOK 1973
Annual Percentage Changes: Urban House Property Price Index and Money Supply

Money Supply and Selected Liquid Assets

Urban House Property Index
FIGURE II

Annual Percentage Changes: Farm Land Price Index and Money Supply

Farm Land Price Index

Money Supply and Selected Liquid Assets

20.