UNLOCKING THE TRUE VALUE OF LAND

BY

DR PHILIP THEUNISSEN
COMPUTUS BESTUURSBURO

Land redistribution in South Africa has sparked a huge debate over the true value of land. Government is increasingly moving away from its original willing buyer, willing seller approach and is lobbying the notion that the so-called inflated market value of land is hindering land reform. Farmers have even been accused of artificially inflating the value of land to prevent new entrants from previously disadvantaged communities gaining a foothold in the property market. Government is now tending towards the viewpoint that the value of farmland should be determined only by its agricultural value and not by market forces.

The agricultural value of land, as well as its productive value, is determined by the landôs ability to generate a return on investment. Four factors are at play here: the size of the capital investment, the investment rate, the period over which the capital is exhausted, and the return that can be generated on the investment. If any three of these factors are known, the fourth can be calculated. In the case of land value, the capital investment (that is the price of the land) can be calculated if the investment rate, the period and the return are known.

Tables 1 and 2 show the average enterprise margin of the main crop and livestock diversifications of farmers in the eastern Free State. The values have been adjusted to make provision for overhead costs and private expenditures. In the case of wheat on dryland, R405 is available per hectare per year for capital investment, while the cultivation of potatoes yields R6 785/ha for capital investment. Maize under irrigation annually gives R3 999/ha for investment capital, and a dairy operation R417/ha.

Investment rate

The return on a capital investment can be compared to investing through a bank. With agricultural investment, however, a risk factor should be added in as farming carries a higher risk and should therefore generate a greater profit than a bank investment. The current interest rate on a fixed investment at the bank is about 6%. Add to that a risk rate of 4%, and an acceptable discount rate for farming comes to 10%, which almost corresponds to the prime lending rate of commercial banks ï and thatôs the discount rate thatôs applied when the agricultural value of land is calculated. The higher the discount rate, the lower the agricultural value of the land will be.

Land is unique in that it doesnôt, like most other capital assets, become exhausted in the production process. A tractor has a limited lifespan ï over a period of 10 to 15 years it becomes obsolete and ultimately unusable. A building on the farm will have a longer lifespan than a tractor, but will also eventually become unusable. If land is farmed in a sustainable manner, it will never be exhausted in the production process, making it difficult to establish a suitable discount period for land. For the purpose of this article, the repayment period of Land Bank, namely 25 years, will be considered. The longer the period, the higher the agricultural value of the land will be.

Capital investment

The margin of each enterprise gets discounted at an interest rate of 10% over a period of 25 years to calculate the total capital investment. The latter includes land and other assets such as implements, irrigation equipment and breeding stock. This means that a dryland farm which exclusively produces wheat should fetch a price of R1 676/ha because the income thatôs generated from the land should be enough to cover all the inputs, overheads, capital and private expenditures. In the case of maize produced under irrigation, the agricultural value of the land should be around R30 949/ha, while it should drop to R785/ha for a semi-intensive beef-cattle operation. These values can be seen as the landôs genetic potential, based on the past five yearsô average net income of farmers who are currently on the land. Itôs unlikely that unskilled, inexperienced new farming entrants will be able to achieve the same return on investment on the land. It will also be unfair to expect a farmer who is forced to sell to be penalised by means of a low land price because the chosen buyer wonôt be able to achieve the same return on investment on the farm.

Market factors

The market value of land, that is the value at which itôs sold for in open trade, is usually higher than the agricultural value of land. Whereas agricultural values are based mainly on historical records, market values rest mainly on expectations of future trends. Therefore, if a buyer expects that he or she may generate more income from a farm than the seller has been able to generate, he or she will be willing to pay more than the current agricultural value of the land. Alternative uses such as town development, tourism or the building of dams also have an escalating effect on land values as developers can often generate more income from the land than agriculture can. Unfortunately, the amount of available farmland is decreasing, not increasing. Thereôs a growing demand for land for town development, mining and industrial activities ï and farmland is the only source that can supply the space needed for this. This helps push land prices up.

An important factor is that land transactions are always clouded by farmers having to continually expand to stay a step ahead of economies of scale. Of course, it would be easier for them to subsidise a relatively expensive farm for a while by using the resources of an existing farm. A farmer who has been in the business for a while can use his or her capacity, labour and tools to generate an income from the new farm. A new entrant, however, must acquire tractors, implements and livestock in addition to buying the land.

In the case of previously disadvantaged communities, it will be almost impossible for a buyer to purchase a fully equipped farm with tractors, implements and breeding stock in one go without help from the state. So-called high land prices are therefore not the only reason why itôs difficult for new entrants to start farming.

In the long term market values cannot leave agricultural values too far behind. The fundamental principle of return on investment will, over time, seek out a balance in land prices, regardless of short-term sentiments that increase market value. Although in some cases farmers will spot a potential buyer a mile off, the price of land in the majority of transactions is based on pure economic principles ï farmers canôt randomly manipulate land prices. But there is truth in what Dr Theo de Jager, vice-president of Agri Limpopo, is reported to have said ï that there wasnôt a land crisis in Zimbabwe until President Mugabe lost a referendum. That emphasises the fact that land is a powerful political tool that can be used to soothe the emotions of the electorate or play down one group (the haves) against the not-haves. No rational argument of financial calculation can influence politicians who use land as a political tool.

Bethlehem
February 2006

TABLE 1: FIVE YEAR AVERAGE NET INCOME FROM LIVE STOCK IN THE EASTERN FREE STATE

	Dry land						Irrigation		
	Wheat	**Beans**	**Potatoes**	**Maize**	**Sunflower**	**Soya**	**Wheat**	**Potatoes**	**Maize**
	R/ha	**R/ha**	**R/ha**	**R/ha**	**R/ha**	**R/ha**	**R/ha**	**R/ha**	**R/ha**
Enterprise margin	601	1477	6981	808	574	114	4423	18918	4645
Overhead cost	46	46	46	46	46	46	46	46	46
Interest on Capital	0	0	0	0	0	0	0	0	0
Private expenses	150	150	150	150	150	150	600	600	600
Available for capital expenditure	**405**	**1281**	**6785**	**612**	**378**	**-82**	**3777**	**18272**	**3999**
Capital investment (@10% for 25 years)	3676	11628	61588	5555	3431	-744	34284	165856	36299
Equipment	2000	2000	4000	2000	2000	2000	2000	4000	2000
Water & electricity	0	0	0	0	0	0	400	400	400
Irrigation equipment	0	0	0	0	0	0	3750	3750	3750
Value of land	**1676**	**9628**	**57588**	**3555**	**1431**	**-2744**	**28934**	**158506**	**30949**

TABLE 2: FIVE YEAR AVERAGE NET INCOME FROM CROPS IN THE EASTERN FREE STATE

	Dairy cattle	**Beef**	**Sheep**
	R/LSU	**R/LSU**	**R/LSU**
Enterprise margin	1839	1178	1560
Carry value (ha/LSU)	3	3	3
	R/ha	**R/ha**	**R/ha**
	613	393	520
Overhead cost	46	46	46
Interest on Capital	0	0	0
Private expenses	150	150	150
Available for capital expenditure	**417**	**197**	**324**
Capital investment (@10% for 25 years)	3785	1785	2941
Breeding stock	2000	1000	1000
Dairy equipment	500	0	0
Value of land	**1285**	**785**	**1941**