



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

***CREATING A NEW VALUATION TOOL
FOR SOUTH AFRICAN AGRICULTURAL
CO-OPERATIVES***

M Geyser & I Liebenberg

Working paper: 2002-21

Department of Agricultural Economics,
Extension and Rural Development
University of Pretoria
Pretoria, 0002
South Africa



University of Pretoria

**CREATING A NEW VALUATION TOOL FOR SOUTH AFRICAN
AGRICULTURAL CO-OPERATIVES**

Abstract

Independent of the size of an organization, long-term shareholder wealth is equally important for all profit seeking organizations. This paper examines introducing Economic Value Added (EVA) as a performance measure for agribusinesses and co-ops in South Africa. EVA is an effective measure of the quality of managerial decisions as well as a reliable indicator of an enterprise's value growth in future.

- M Geysers & I E Liebenberg

- Department of Agricultural Economics, Extension & Rural Development

- University of Pretoria

- mgeyser@postino.up.ac.za

- Tel. (012) 420-3251

CREATING A NEW VALUATION TOOL FOR SOUTH AFRICAN AGRICULTURAL CO-OPERATIVES

1. Introduction

Every asset, financial as well as real, has a value. The key to successfully investing in and managing these assets lies in understanding not only what the value is but also the sources of the value. Any asset can be valued, but some assets are easier to value than others and the details of valuation will vary from case to case. Thus, the valuation of a share of a real estate property will require different information and follow a different format than the valuation of a publicly traded share and the valuation of an agricultural co-operative. What is surprising, however, is not the differences in valuation techniques across assets, but the degree of similarity in basic principles.

The traditional discounted cash flow model provides for a rich and thorough analysis of all the different ways in which a firm can increase value, but it can become complex, as the number of inputs increases. It is also very difficult to tie management compensation systems to a discounted cash flow model, since many of the inputs need to be estimated and can be manipulated to yield the results management wants.

If market efficiency is assumed, the unobservable value from the discounted cash flow model is replaced with the observed market price and valuation of the business and/or reward managers are based upon the performance of the share. Thus, a firm whose share price has gone up is viewed as having created value, whereas one, whose share price has fallen, has destroyed value. While market prices have the advantage of being up to date and observable, they are also noisy. Even if markets are efficient, share prices tend to fluctuate around the true value. Thus, a firm may see its share price go up and its top management rewarded, even as it destroys value. Conversely, the managers of a firm may be penalized as its share prices drops, even though the management may have taken actions to increase firm value. The other problems with share prices, as the basis for compensation,

is that they are available only for the entire firm. Share prices cannot be used to analyze the managers of individual divisions of a firm or for their relative performance. Furthermore, the discounted cash flow model is only usable for firms with traded share prices.

In the last decade, while firms have become for focused on value creation, new mechanisms for measuring value, were created. The two mechanisms that seem to have made the most impact are:

- Economic value added (EVA), which measures the rand surplus value created by a firm on its existing environment, and
- Cash flow return on investment (CFROI), which measures the percentage return made by a firm on its existing investments.

These mechanisms enable all types of firms to determine their value creation. In this article, we look at how the calculation of EVA can be adapted for usage by agricultural co-operatives.

2. WHAT IS EVA?

EVA is a value based financial performance measure, an investment decision tool and it is also a performance measure reflecting the absolute amount of shareholder value created. It is computed as the product of the “excess return” made on an investment or investments and the capital invested in that investment or investments. EVA is the net operating profit minus an appropriate charge for the opportunity cost of all capital invested in an enterprise or project. It is an estimate of true economic profit, or amount by which earnings exceed or fall short of the required minimum rate of return investors could get by investing in other securities of comparable risk (Stewart, 1990).

EVA is not a new discovery. Residual income, an accounting performance measure, is defined to be operating profit subtracted with capital charge. Thus EVA is a variation of residual income with adjustments to how one calculates income and capital. Stern Stewart & Co., a consulting firm based in New

York, introduced the concept on EVA as a measurement tool in 1989, and trade marked it. The EVA concept is often called Economic Profit (EP) to avoid problems caused by the trade marking. EVA is so popular and well known that all residual income concepts are often called EVA even though they do not include the main elements defined by Stern Stewart & Co. (Pinto, 2001).

Up to 1970 residual income did not get wide publicity and it did not end up to be the prime performance measure in companies. However, EVA has done it in recent years (Mäkeläinen, 1998). In the 1990's, the creation of shareholder value has become the ultimate economic purpose of a corporation. Firms focus on building, operating and harvesting new businesses and/or products that will provide a greater return than the firm's cost of capital, thus ensuring maximization of shareholder value. EVA is a strategy formulation and a financial performance management tool that help companies make a return greater than the firm's cost of capital. Firms adopt this concept to track their financial position and to guide management decisions regarding resource allocation, capital budgeting and acquisition analysis.

2.1 Advantages of EVA

EVA is frequently regarded as a single, simple measure that gives a real picture of shareholder wealth creation. In addition to motivate managers to create shareholder value and to be a basis for management compensation, there are further practical advantages that value based measurement systems can offer. An EVA system helps managers to (Roztoci & Needy, 1998):

- ◆ Make better investment decisions;
- ◆ Identify improvement opportunities; and to
- ◆ Consider long-term and short-term benefits for the company.

EVA is an effective measure of the quality of managerial decisions and a reliable indicator of a company's value growth in the future. Constant positive

EVA values over time will increase company values, while negative EVA values might decrease company values.

2.2 Limitations of EVA

Like other financial performance measures, such as return on investment (ROI), EVA, on its own, is inadequate for assessing a company's progress in achieving its strategic goals and in measuring divisional performance. Other more forward-looking measures, often non-financial in nature should be included in regular performance reports to provide early warning signs of problem areas (Wood, 2000). In certain industries EVA alone is inappropriate to evaluate financial performance. For new high growth companies, such as those in technology, year-on-year changes in EVA, which may be negative at times, are unlikely to explain changes in a firm's value, given that the value is dependent on future expected cash flows (Wood, 2000).

Another problem of EVA is that inflation distorts it with the result that it cannot be used during inflationary times to estimate actual profitability. A superior measure, the adjusted EVA, corrects for inflationary distortions.

3. EVA RESEARCH IN SOUTH AFRICA

Several research studies focused on EVA in South Africa, but no research was done to develop EVA as a measurement tool for agricultural co-operatives. Several studies examined the relationship between EVA and shareholder value maximization. Bottger (1999) found that the basic corporate finance and microeconomic theory indicate that the primary financial directive of any firm ought to be to maximize the wealth of the shareholders. The EVA concept is considered from a financial management perspective. It was found that one of the major challenges facing EVA implementation is changing traditional methods of financial reporting. You Lee (1995) did a study on the usage of EVA as a corporate performance measurement tool. The main research finding was that within the context of the JSE, EVA is at best marginally better than ROA and ROE.

In 1996 a study was done by Lloyd that examines the use of four traditional share valuation techniques that are based on different versions of economic value added. Pearson (1998) did a study that compares the explanatory power of EVA to that of Refined Economic Value Added (REVA) for share returns on the mining sector of the JSE. It was found that EVA partially explains share returns, while REVA does not appear to explain share returns at all. Manipulating the EVA information to obtain the annual change in EVA leads to the finding that the annual change in EVA explains a significant portion of share returns in the mining sector. This suggests that positive changes in EVA, from one year to the next, could be a reliable measure of management performance. Pretorius (1997) and Jansen (1998) both did research on EVA as an investment decision-making measure.

4. CALCULATING EVA

The definition of EVA outlines three basic inputs needed for its computation — the return on capital earned on investments, the cost of capital for those investments and the capital invested in them. The formula for determining EVA is:

$$EVA = \left(\frac{NOPAT}{Capital\ invested} - Cost\ of\ Capital \right) \times Capital\ invested$$

How much *capital is invested* in existing assets? One obvious answer is to use the market value of the firm, but market value includes capital invested not just in assets in place, but also in expected future growth. Since the quality of assets needs to be evaluated, the market value of only those assets needs to be estimated. The book value of capital as a proxy for the market value of capital invested in assets can be used in determining the value of capital (Kramer & Pushner, 1997). The book value, however, is a number that reflects not just the accounting choices made in the current period, but also accounting decisions made over time on how to depreciate assets, value inventory and deal with acquisitions. At the minimum, three adjustments need to be made to capital invested when computing EVA — converting operating leases into debt, capitalizing R&D expenses and eliminating the effect of one-time or cosmetic charges (O'Byrne, 1996). Through these adjustments, the true capital invested can be determined. Given the fact that few agricultural cooperatives are capital intensive with a short write-off period, the book value

method, with the abovementioned adjustments were used in determining the capital invested.

To evaluate the return on this invested capital, the *after-tax operating income* (NOPAT) earned by a firm on these investments need to be estimated. Again, the accounting measure of operating income has to be adjusted for operating leases, R&D expenses and one-time charges to compute the return on capital.

The third and final component needed to estimate EVA is the *cost of capital*. The cost of capital should be estimated based upon the market values of debt and equity in the firm, rather than book values (Kramer & Pushner, 1997). There is no contradiction between using book value for purposes of estimating capital invested and using market value for estimating cost of capital, since a firm has to earn more than its market value cost of capital to generate value. From a practical standpoint, using the book value cost of capital will tend to understate cost of capital for most firms and will understate it more for more highly leveraged firms than for lightly leveraged firms. Understating the cost of capital will lead to overstating the economic value added.

While there are several accepted risk and return models in finance, they all share some common views about risk. First, they all define risk in terms of variance in actual returns around an expected return; thus, an investment is riskless when actual returns are always equal to the expected return. Second, they all argue that risk has to be measured from the perspective of the marginal investor in an asset, and that this marginal investor is well diversified. Therefore, the argument goes, it is only the risk that an investment adds on to a diversified portfolio that should be measured and compensated. In fact, it is this view of risk that leads risk models to break the risk in any investment into two components. There is a firm-specific component that measures risk that relates only to that investment or to a few investments like it, and a market component that contains risk that affects a large subset or all investments. It is the latter risk that is not diversifiable and should be rewarded. While all risk and return models agree on this fairly crucial distinction, they part ways when it comes to how measure this market risk. The capital asset pricing model, with assumptions about no transactions cost or private information, concludes that the marginal investor hold a portfolio that includes every traded asset in the market, and that the risk of any investment is the risk added on to this "market portfolio". The expected return from the model is

$$R_j = R_f + b(R_m - R_f)$$

Where:

R_j = Cost of capital

R_f = Risk-free rate

b = Beta

R_m = Average market return

5. APPLYING EVA TO AGRICULTURAL CO-OPERATIVES

The concepts of EVA is adjusted and applied to four agricultural co-operatives in South Africa. The selection of the co-operatives was random¹ and EVA was determined for the period from 1998 to 2000. Table 1 indicates NOPAT, the capital invested and the cost of that capital for three agricultural co-operatives.

¹ This is research in progress and the main objective of the research is to determine the EVA of all trading co-operatives in South Africa for the period 1997 to 2001.

Table 1: NOPAT, capital, the cost of capital and EVA of three agricultural co-operatives for the period from 1998 to 2000.

	Co-op A	Co-op B	Co-op C
1998			
NOPAT	4,743,524	14,525,949	13,337,848
Capital	59,361,872	66,603,202	208,694,254
Cost of capital	15.52	3.90	17.48
EVA	(4,471,735)	11,929,606	(23,149,935)
1999			
NOPAT	(2,789,963)	5,196,449	19,898,230
Capital	93,613,696	64,528,793	253,382,206
Cost of capital	11.58	6.50	14.49
EVA	(13,626,994)	1,004,314	(16,825,806)
2000			
NOPAT	3,719,599	9,926,734	24,292,500
Capital	41,442,518	65,113,060	209,807,000
Cost of capital	17.36	10.39	17.18
EVA	(3,475,040)	3,163,147	(11,758,641)

In determining the cost of capital, the following assumptions were made:

- The average of the R150 for 2000 was used as the risk-free rate
- The average beta of a number of listed companies in the food and related sector was used as the beta
- A market risk premium of 6%² was used.
- The weighted average cost of capital (WACC) was used in determining the cost of capital. Capital includes fixed assets and working capital. The weighted average cost of capital is a weighted average of the costs of debt and equity capital, where the weights are the market values of debt and equity. The WACC of the cooperatives reflects their unique composition between debt and equity, thus reflecting the risk of the cooperative.

² Stern Steward & Co. in South Africa uses 6% in all their valuations.

Table 2 indicates the figures used in determining the cost of capital for the selected cooperatives for the period from 1998 to 2000.

Table 2: Figures used in calculating the cost of capital for the period from 1998 to 2000

	1998	1999	2000
R150 (%)	15.03	14.49	13.17
Beta	0.66	0.78	0.85

The financial statements of the three selected co-operatives are given in appendixes A and B. The financial statements were obtained from the Registrar of Co-operatives. It is clear from the table that only Co-op B succeeded in creating value for its members for the period under consideration.

6. CONCLUSION

The value of a co-operative has three components. The first is its capacity to generate cash flows from existing assets, with higher cash flows translating into higher value. The second is its willingness to reinvest to create future growth and the quality of these reinvestments. The final component of value is the cost of capital. To create value then a co-operative has to:

- Generate higher cash flows from existing assets, without affecting its growth prospects or its risk profile.
- Reinvest more and with higher excess returns, without increasing the riskiness of its assets.
- Reduce the cost of financing its assets in place or future growth, without lowering the returns made on these investments.

In this study, we consider EVA as a value enhancement measure for agricultural co-operatives. EVA measures the rand excess return on existing assets. It is important to remember when using EVA as a value enhancement measure that it will not work unless there is a commitment on the part of

managers in making value maximization their primary objective. And finally, there are no magic bullets that create value. Value creation is hard work in competitive markets and almost involves a trade off between costs and benefits. Everyone has a role in value creation and it certainly is not the sole domain of financial analysts. In fact, the value created by financial engineers is smaller and less significant than the value created by good strategic, marketing, production or personnel divisions.

By improving the value of the cooperative, the net present value (NPV) is increased. That leads to higher value in shares. Cooperatives can therefore utilize EVA in increasing their shareholder value.

REFERENCES

Bottger, R. 1999. Economic value added (EVA): the essence to creating real wealth? Mcom Dissertation. University of Stellenbosch, Department of Economics, South Africa

Jansen, C. 1998. South African Marine Corporation Limited: using economic value added (EVA_{tm}) for capital project evaluation. MBA Thesis. University of Cape Town, Graduate School of Business, South Africa.

Kramer, J.R. & Pushner, G. 1997. An Empirical Analysis of Economic Value Added as Proxy of Market Value Added. Financial Practice and Education, vol. 7, 41 – 49.

Lloyd, P. 1996. A study of the relationship between changes in share price and contemporaneous changes in economic value added and other corporate performance measures. MBA Dissertation. University of Cape Town, Graduate School of Business, South Africa.

Mäkeläinen, E. 1998. Economic Value Added. <http://www.evanomics.com> (access 2002/06/03).

O'Byrne, S.F. 1996. EVA and Market Value. Journal of Applied Corporate Finance, vol. 9, nr. 1, 116– 125.

Pearson, G.D. 1998. An analysis of the explanatory power of economic value added and refined economic value added for share returns in the mining sector. MBA Dissertation. University of Cape Town, Graduate School of Business, South Africa

Pinto. 2001. Economic Value Added. <http://www.evanomics.com> (access 2002/06/03).

Pretorius, J.L. 1997. Ekonomiese waarde toegevoeg as alternatiewe waarderingmetode. Mcom Verhandeling. Rand Afrikaanse Universitet, Suid Afrika.

Roztock, N. & Needy, K.L. 1998. EVA for Small Manufacturing Companies. Working Paper, University of Pittsburgh, Department of Industrial Engineering.

Stewart, M.L. 1990. The Quest for Value. Harper: New York.

Wood, N. 2000. Economic value added (EVA): Uses, benefits and limitations – A South African perspective. Southern African Business Review, vol. 4, nr. 1, 46 – 53

You Lee, D.F. 1995. EVA as a measure of corporate performance. MBA Dissertation. University of the Witwatersrand, Graduate School of Business Administration, South Africa.

Appendix A: Balance sheets of three selected co-operatives for the financial years of 1997 to 2000.

	Co-op A			
Balance sheet for the year ended	1997	1998	1999	2000
Reserves & undistributed income				
Reserve	20,325,022	31,755,280	18,108,608	4,475,572
Undistributed income	-	-	-	-
Acc deficit	-	-	-	-
Total own resources	20,325,022	31,755,280	18,108,608	4,475,572
Sources from members				
Paid-up share capital	2,552,084	2,717,072	2,552,084	196,323
Members funds	22,773,753	16,502,681	17,437,462	2,903,520
Members loans	-	-	-	-
Total members' sources	25,325,837	19,219,753	19,989,546	3,099,843
Total members interest	45,650,859	50,975,033	38,098,154	7,575,415
External LT liabilities				
Land Bank loans	8,491,964	37,082,498	2,902,208	14,595,623
Other loans	-	-	-	-
Total interest-bearings external	8,491,964	37,082,498	2,902,208	14,595,623
Deferred tax	2,876,045	5,556,165	-	2,065,075
Other interest-free LT liabilities	-	-	-	-
Total LT liabilities	11,368,009	42,638,663	2,902,208	16,660,698
Total LT liabilities	57,018,868	93,613,696	41,000,362	24,236,113
Current liabilities				
Land bank loans	-	-	-	-
Deferred sale transactions	-	-	-	-
Other loans	-	-	-	-
Total Land Bank loans	-	-	-	-
Bank overdraft and acceptances	-	-	-	-
Other interest-bearing current liab	-	-	-	-
ST portion of LT liabilities	2,343,004	-	442,156	-
Other	-	-	-	-
Total interest bearing current	2,343,004	-	442,156	-
Creditors	54,045,103	40,584,147	24,145,110	9,888,810
Net agents' stock & pool account	-	-	-	-
Other non-int current liab	-	-	-	-
Total current liabilities	56,388,107	40,584,147	24,587,266	9,888,810
Total external liabilities	67,756,116	83,222,810	27,489,474	26,549,508
Total members interest & liab	113,406,975	134,197,843	65,587,628	34,124,923
Fixed assets				
Fixed assets	24,241,097	44,359,152	20,422,908	14,069,499
Investments and loans	2,000,766	18,913,848	1,565,815	12,069,706
Goodwill, trademarks, patents	-	-	-	-
Total LT assets	26,241,863	63,273,000	21,988,723	26,139,205
Current assets				
Debtors	-	-	-	-
Members debtors	1,989,572	2,174,899	1,283,092	1,545,072
Other debtors	7,474,083	7,583,679	6,280,500	19,955
Total debtors	9,463,655	9,758,578	7,563,592	1,565,027
Prepaid expenses	13,101	-	8,538	-
Total debtors	9,476,756	9,758,578	7,572,130	1,565,027
Net agents' stock & pool accounts	43,583,728	-	20,709,166	6,362,723
Stock	2,046,598	44,174,256	2,131,417	57,968
Cash on hand & in bank	32,058,030	16,992,009	13,186,192	-
Total current assets	87,165,112	70,924,843	43,598,905	7,985,718
Total assets	113,406,975	134,197,843	65,587,628	34,124,923

	Co-op B			
Balance sheet for the year ended	1997	1998	1999	2000
Reserves & undistributed income				
Reserve	9,237,384	20,141,704	17,842,080	21,228,265
Undistributed income	-	-	-	-
Acc. deficit	-	-	-	-
Total own resources	9,237,384	20,141,704	17,842,080	21,228,265
Sources from members				
Paid-up share capital	1,725,914	1,726,503	1,729,103	1,729,183
Members funds	2,708,862	-	-	-
Members loans	-	-	-	-
Total members' sources	4,434,776	1,726,503	1,729,103	1,729,183
Total members interest	13,672,160	21,868,207	19,571,183	22,957,448
External LT liabilities				
Land Bank loans	3,522,062	2,383,977	3,432,159	3,364,241
Other loans	785,504	1,367,715	2,494,414	2,770,932
Total interest-bearings external	4,307,566	3,751,692	5,926,573	6,135,173
Deferred tax	-	-	-	-
Other interest-free LT liabilities	-	-	-	-
Total LT liabilities	4,307,566	3,751,692	5,926,573	6,135,173
Total LT liabilities	17,979,726	25,619,899	25,497,756	29,092,621
Current liabilities				
Land bank loans	40,311,968	33,806,441	34,337,549	40,248,770
Deferred sale transactions	-	-	-	-
Other loans	-	-	-	-
Total Land Bank loans	40,311,968	33,806,441	34,337,549	40,248,770
Bank overdraft and acceptances	7,844,947	4,015,221	4,755,311	1,405,721
Other interest-bearing current liab	-	-	-	-
ST portion of LT liabilities	466,561	1,087,232	522,444	301,123
Other	-	-	-	-
Total interest bearing current	48,623,476	38,908,894	39,615,304	41,955,614
Creditors	8,372,369	11,369,538	9,860,771	17,276,335
Net agents' stock & pool account	-	-	-	-
Other non-int current liab	-	-	-	-
Total current liabilities	56,995,845	50,278,432	49,476,075	59,231,949
Total external liabilities	61,303,411	54,030,124	55,402,648	65,367,122
Total members interest & liab	74,975,571	75,898,331	74,973,831	88,324,570
Fixed assets				
Fixed assets	11,490,576	15,640,772	16,044,353	19,972,911
Investments and loans	1,635,839	6,160,300	6,040,784	5,856,883
Goodwill, trademarks, patents	-	-	-	-
Total LT assets	13,126,415	21,801,072	22,085,137	25,829,794
Current assets				
Debtors	-	-	-	-
Members debtors	37,392,364	27,295,628	27,367,994	31,138,301
Other debtors	5,449,099	3,887,468	4,703,772	6,071,615
Total debtors	42,841,463	31,183,096	32,071,766	37,209,916
Prepaid expenses	(6,050,000)	-	-	-
Total debtors	36,791,463	31,183,096	32,071,766	37,209,916
Net agents' stock & pool accounts	5,280,846	-	-	-
Stock	19,776,847	21,404,312	19,129,821	23,414,487
Cash on hand & in bank	-	1,509,851	1,687,107	1,870,373
Total current assets	61,849,156	54,097,259	52,888,694	62,494,776
Total assets	74,975,571	75,898,331	74,973,831	88,324,570

	Co-op C			
	1997	1998	1999	2000
Balance sheet for the year ended				
Reserves & undistributed income				
Reserve	67,352,603	67,903,021	60,096,000	63,699,676
Undistributed income	-	-	-	-
Acc deficit	-	-	-	-
Total own resources	67,352,603	67,903,021	60,096,000	63,699,676
Sources from members				
Paid-up share capital	19,795,923	20,347,620	20,915,000	21,251,374
Members funds	104,993,568	103,319,707	108,560,000	111,582,036
Members loans	-	-	-	-
Total members' sources	124,789,491	123,667,327	129,475,000	132,833,410
Total members interest	192,142,094	191,570,348	189,571,000	196,533,086
External LT liabilities				
Land Bank loans	-	-	-	-
Other loans	-	-	-	39,818
Total interest-bearings external	-	-	-	39,818
Deferred tax	-	-	-	-
Other interest-free LT liabilities	-	-	-	-
Total LT liabilities	-	-	-	39,818
Total LT liabilities	192,142,094	191,570,348	189,571,000	196,572,904
Current liabilities				
Land bank loans	-	-	-	-
Deferred sale transactions	-	-	-	-
Other loans	-	-	-	-
Total Land Bank loans	-	-	-	-
Bank overdraft and acceptances	-	-	-	-
Other interest-bearing current liab	-	-	-	-
ST portion of LT liabilities	16,552,160	61,811,858	20,236,000	-
Other	-	-	-	-
Total interest bearing current	16,552,160	61,811,858	20,236,000	-
Creditors	54,341,574	51,329,711	47,824,000	50,876,697
Net agents' stock & pool account	-	-	-	-
Other non-int current liab	-	-	-	-
Total current liabilities	70,893,734	113,141,569	68,060,000	50,876,697
Total external liabilities	70,893,734	113,141,569	68,060,000	50,916,515
Total members interest & liab	263,035,828	304,711,917	257,631,000	247,449,601
Fixed assets				
Fixed assets	18,236,519	22,047,136	22,816,000	32,538,265
Investments and loans	312,001	312,001	2,740,000	186,212
Goodwill, trademarks, patents	-	-	-	-
Total LT assets	18,548,520	22,359,137	25,556,000	32,724,477
Current assets				
Debtors	-	-	-	-
Members debtors	35,428,159	21,920,914	118,452,000	118,668,523
Other debtors	11,590,503	13,805,214	-	6,354,379
Total debtors	47,018,662	35,726,128	118,452,000	125,022,902
Prepaid expenses	-	-	-	-
Total debtors	47,018,662	35,726,128	118,452,000	125,022,902
Net agents' stock & pool accounts	173,343,827	223,774,832	75,979,000	35,781,297
Stock	15,197,227	14,885,477	20,536,000	26,921,071
Cash on hand & in bank	8,927,592	7,966,343	17,108,000	26,999,854
Total current assets	244,487,308	282,352,780	232,075,000	214,725,124
Total assets	263,035,828	304,711,917	257,631,000	247,449,601

Appendix B: Income statements of three selected co-operatives for the period from 1998 to 2000.

Income statement for the year ended	Co-op A		
Net income/(Loss) for the year (after tax)	2,044,338	1,652,663	671,111
Extraordinary items	-	-	-
Tax	(1,020,049)	(434,137)	(287,619)
Net income/(Loss) before tax and other items	1,024,289	1,218,526	958,730
Other income/(Expenditure)	-	-	-
Net income/(Loss)	3,064,387	2,086,800	958,730
Lease monies	-	-	-
Depreciation of fixed assets	4,446,905	2,085,071	1,810,400
Directors remuneration	110,297	-	-
Auditors remuneration	89,500	34,680	35,726
Provisions	-	-	-
Irrecoverable debts written off	-	-	-
Interest paid	4,605,937	1,729,851	1,404,875
Capital profit/(loss) on the disposal of fixed assets	-	-	-
Income from investments	5,095,267	-	-
Adjusted net income	17,412,293	5,936,402	4,209,731
Plus all interest received	-	1,183,159	721,848
Net operating income	7,221,759	7,119,561	3,487,883

Income statement for the year ended	Co-op B		
Net income/(Loss) for the year (after tax)			
Extraordinary items			
Tax	6,872,911	(2,300,342)	3,386,185
Net income/(Loss) before tax and other items	-	-	-
Other income/(Expenditure)	(4,699)	(718)	-
Net income/(Loss)	6,868,212	(2,301,060)	3,386,185
Lease monies	-	-	-
Depreciation of fixed assets	6,877,610	2,299,642	3,386,185
Directors remuneration	-	-	-
Auditors remuneration	882,751	973,945	954,627
Provisions	297,432	341,479	384,000
Irrecoverable debts written off	164,470	175,501	200,200
Interest paid	-	-	-
Capital profit/(loss) on the disposal of fixed assets	2,085,921	3,904,739	3,071,631
Income from investments	7,658,278	7,494,453	6,540,549
Adjusted net income	-	127,479	53,840
Plus all interest received	58,801	82,424	186,234
Net operating income	18,025,263	10,800,396	14,297,118

Income statement for the year ended	Co-op C		
Net income/(Loss) for the year (after tax)			
Extraordinary items			
Tax	8.851.837	10.392.000	16.906.363
Net income/(Loss) before tax and other items	-	-	-
Other income/(Expenditure)	(2.456.586)	(2.089.000)	(2.893.456)
Net income/(Loss)	6.395.251	8.303.000	19.799.819
Lease monies	-	-	(84)
Depreciation of fixed assets	11.308.423	12.481.000	19.799.735
Directors remuneration	-	-	-
Auditors remuneration	4.348.837	-	8.562.946
Provisions	413.321	-	396.460
Irrecoverable debts written off	368.735	-	392.440
Interest paid	-	-	705.949
Capital profit/(loss) on the disposal of fixed assets	1.882.075	-	40.206
Income from investments	7.283.983	12.702.000	8.650.245
Adjusted net income	25.147	-	148.959
Plus all interest received	1.345.999	-	277.004
Net operating income	257.651.320	25.183.000	38.122.018

