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AGRICULTURAL POLICY AND MACROECONOMIC ISSUES IN SOUTH AFRICA IN PERSPECTIVE

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This article attempts to reflect on the of the evolution of agricultural policies in South Africa since the 1980's. It also attempts to investigate certain macroeconomic and sectoral issues, which together with policy contributed to a situation of poverty amongst surpluses. Deregulation and the switch to the small farmer philosophy combined with envisaged co-operation between agricultural and general economic policy is regarded as essential for future progress.

'N PERSPEKTIEF OP LANDBOUBELEID EN MAKRO-EKONOMIESE AANGE-LEENTHEDE IN SUID-AFRIKA

Die studie poog om die ontwikkeling en die Suid-Afrikaanse landboubeleid vanaf die 1980s te weerspieël. Dit ondersoek ook sekere makro-ekonomiese en sektorale tendense wat saam met die landboubeleid armoede tussen welvaart tot gevolg gehad het. Essensieel vir toekomstige welvaart is deregulering, oorskakeling na kleiner boerderye en 'n vennootskap tussen die landboubeleid en algemene ekonomiese beleid in Suid-Afrika.

1. INTRODUCTION

The main objective of this paper is to present certain major effects and developments in agricultural policy in South Africa. Certain macro-economic variables which influenced both policy response and achievements are investigated and future trends identified.

2. FARM POLICY

According to Vink (1995) the combination of segregation of land ownership and a two-track approach to access to support services had a number of major effects on the farming sector in South Africa:

- it resulted in institutional multiplication with attendant fiscal costs and internal barriers to farm trade;
- it created "two agricultures" in respect to access to land, support services and productivity, etc.;

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[1] *Vista University and Development Bank of Southern Africa respectively.*

- it created the anomaly of food "surpluses" while the majority of the population lived well below minimum levels of standard of living;

- for much of the period up to the 1980s input prices rose faster than product prices despite attempts to keep domestic prices above parity with imports;

- the combination of subsidies and distortive price policies led a high rates of growth in farm land prices; and

- the processes of forced removals and homeland consolidation created a high level of uncertainty among individual farmers, both black and white, as to the protection of existing property rights, with negative consequences in some of the ecologically most vulnerable parts of the country.

Beginning in the 1980's the agricultural authorities effected much deregulation and policy change in the farm sector:

- farmers were exposed to market interest rates, and also to market exchange rates as opposed to previous distortions;

- the extensive deregulation of controlled marketing;

- liberalisation of price controls of maize meal, flour, bread, dairy products, the change in price setting in the maize industry from a cost plus basis to a market-based system and the termination of consumer price subsidies on maize meal and bread;

- a change in tax treatment of agriculture. This reduced the implicit subsidy represented by income tax concessions to farmers amounting in 1981-1984 to 70 per cent of their theoretical tax bill and the reduction from 11 to 3 year the period over which capital purchases can be written off. Restrictions were also introduced on the extent to which farming can be used as a tax shelter for other income sources. In addition co-operatives are liable for taxation;

- a change in direct budgetary expenditure, including a proportionate increase in budgetary transfers to the homelands and a reduction of real spending on commercial agriculture; and

- according to schedule 6 of the interim constitution, provincial departments must develop their own agricultural policies. This provision will probably lead to further liberalisation of agriculture at least in some of the provinces.

According to the overriding provisions of section 126(3) of the interim constitution a national agricultural policy is also necessary and a distinction should therefore be made between national and provincial responsibilities towards agriculture and its different role-players. Agricultural policy will have to subscribe to Constitutional principles. Policies will have to be seen as transparent and representative and have to comply with the vision of a new agricultural policy in South Africa, as specified in the White Paper on Agriculture (White Paper, 1995):

"A highly efficient and economically viable market-directed farming sector, characterised by a wide range of farm sizes, which will be regarded as the economic and social pivot of rural South Africa and which will (positively) influence the rest of the economy and society."

To accomplish this, the following goals will have to be pursued (White Paper, 1995):

- develop a new order of economically viable, market-directed commercial farmers, with the family farm as the basis;

- the broadening of access to agriculture via land reform should be enhanced by adequate agricultural policy instruments, and supported by means of the provision of appropriate services;

- financial systems should focus on the resource-poor and beginner farmers, enabling them to purchase land and agricultural inputs;

- trade in and the marketing of agricultural products should reflect market tendencies;

- agricultural production should be based on the sustainable use of the natural agricultural and water resources; and

- developing agriculture's importance in the regional development framework of Southern Africa and other countries.

From the main provisions of this White Paper it is obvious that a further deregulation of the farming sector and a shift to the small farmer philosophy

and measures to implement the effort is imminent. The question is this turnabout in farm policy on its own be successful or will it need the co-operation of macro-economics policies to succeed? In order to try to shed some light to this question we turn to macro-economic and sectoral issues.

3. MACRO-ECONOMIC AND SECTORAL ISSUES

Agriculture in South Africa has been affected not only by agricultural policy measures but also by consecutive changes to general economic policy, and by macro-economic performance.

In the period prior to the 1980s, key sectors of agriculture benefited from output prices maintained above border parity, by several forms of subsidy including interest rates, and by relatively favourable taxation. Conversely, the sector was disadvantaged by industrial protection which affected agricultural prices which in turn was partly offset by subsidies.

Over the past one and a half decades however, wide range of policy changes occurred in the general direction of market orientation. First in the financial sector and then in agriculture self. The impact has varied considerably by subsector with some, e.g. producers of some export commodities unencumbered by debt benefiting; while profitability of others as main grain producers, has fallen.

3.1 Fiscal policy

Fiscal policy is the conscious attempt by government to meet employment, income growth and distribution, and other objectives through its powers to tax and spend. Fiscal policies are usually aimed at reducing deficit government spending through restraints on expenditures and, to lessor extent, through expanded government revenues. Measures to reduce expenditures include decreases in explicit subsidies on food and other goods and services; cuts in social programmes such as health care, education, and direct income transfers; and efforts to reduce deficits in public sector enterprises.

3.1.1 Investment

Table 1 shows the ratio of private consumption expenditure to the GDP increased from 50,2 percent in 1980 to 59,20 percent in 1994. The ratio of consumption expenditure by general government to GDP shows a similar trend. The ratio of gross domestic fixed investment to GDP declined also from 26,2 percent in 1980 to 15,7 percent in 1994. The ratio of public sector

expenditure to GDP remained relatively stable in the same period. The ratio of gross domestic saving to GDP declined however sharply from 34,5 to 17,6 percent in 1994.

Table 1: Ratios of selected data, 1980 - 1994

Year	Private consumption expenditure to GDP	Consumption expenditure by general government to GDP	Gross domestic fixed investment to GDP	Public sector expenditure to GDP	Gross saving to GDP
1980	50.20	13.30	26.20	26.80	34.50
1985	53.70	17.30	23.30	27.10	24.50
1990	57.80	19.10	19.60	25.00	19.50
1991	59.00	19.70	17.80	25.40	18.90
1992	60.90	20.60	16.60	25.80	17.00
1993	60.20	20.60	15.40	25.30	17.50
1994	59.20	21.10	15.70	25.10	17.60

Source: SA Reserve Bank Quarterly Bulletin, March 1995

Gross domestic fixed investment in agriculture shows a steady decline from more than 11 per cent in 1960 to only 3,7 per cent in 1994. Table 2 depicts the trend since 1987. According to the Reserve Bank this trend was especially profound during the drought years.

According to Du Toit & Falkena (1995) the major reasons for the general deteriorating investment trend, apart from the drought situation in the country were:

- the increased political uncertainty during the last decade;
- the impact of trade sanctions and major capital outflows;
- the need to improve corporate cash flows in the face of poor economic performance;
- at times high real interest rates;
- high cost increases due to weak exchange rate; and
- lower investment by the government sector.

3.1.2 Taxation and agriculture

According to international trade theory and general equilibrium analysis, a policy that protects one particular sector of the economy (e.g. input industry)

is essentially imposing a tax on other sectors of the economy (e.g. agriculture).

Table 2: Agricultural sector: Trends in GDP and gross domestic fixed investment, 1987-1994

Year	GDP at constant 1990 prices				Gross domestic fixed investment		
	Agriculture forestry & fishing [R millions]	Total [R millions]	% change in GDP from previous year	Agriculture as % of total	Agriculture [R millions]	Total [R millions]	Agriculture as % Total
1987	11 922	234 003		5.09	1 939	46 211	4.20
1988	12 256	243 225	3.94	5.04	2 293	52 026	4.41
1989	14 058	249 192	2.45	5.64	2 369	55 410	4.28
1990	13 055	247 315	-0.75	5.28	2 154	54 113	3.98
1991	13 638	244 549	-1.12	5.58	1 771	50 115	3.53
1992	9 921	238 711	-2.39	4.16	1 498	47 479	3.16
1993	11 578	241 761	1.28	4.79	1 472	45 874	3.21
1994	12 606	246 855	2.11	5.11	1 801	49 123	3.67

Examples of this type of intervention in South Africa include the Atlantis Diesel engine project and protection of the local fertiliser industry. On the other hand agriculture in South Africa has benefited from fiscal policy measures on both government revenue (tax) and expenditure sides. Over the past two decades, agriculture has been characterised by various tax concessions. Farmers had an incentive to purchase capital assets because an entire asset value could be written off for tax purposes within the first year of purchase. This concession tended to lead to over-investment in good years. Since the mid-eighties this concession was altered to three years depreciation as part of its favourable tax position in respect capital purchases. Farmers, however, continued enjoy a tax benefit in that few capital items lose their value in three years. Depreciation provisions for agriculture are however still more advantageous than in other sectors, where depreciation for tax purposes is on a straight line basis over five years.

In addition, capital improvements on farms are fully tax deductible as long as the farmer the farmer made a taxable profit in the year concerned. In case of an excess capital expenditure it is carried forward till sufficient profit is made in future years when the accumulated capital expense is written off (AgriReview, 1992). On the government expenditure side, a great deal of state aid has been granted to agriculture. This has an effect on the normal operation of market forces in the agricultural and related sectors. State aid for

agriculture as a strategic industry is justifiable in certain cases (disasters), but usually lead to distortions in production and market side.
Helm & Van Zyl (1995) attempted to measure the support South Africa agriculture received over the past five years. They calculated total support to agriculture in terms of Producer Subsidy Equivalent (PSE) and showed that with the exception of Australia and New Zealand, South Africa had a relatively low degree of support compared to a large selection of developed countries. Table 3 gives the total PSE, as well as the percentage PSE, for selected OECD countries.

Table 3: Total and percentage PSE, 1988-1992

Country	Unit	1988	1989	1990	1991	1992
Australia						
Total PSE	US$ bn	1.88	1.23	1.54	1.47	1.30
Percentage PSE	%	9	9	13	14	12
Canada						
Total PSE	US$ bn	6.29	6.10	8.74	8.11	6.76
Percentage PSE	%	43	40	49	48	44
EU						
Total PSE	US$ bn	69.23	69.69	82.30	84.50	84.40
Percentage PSE	%	46	41	46	49	47
Japan						
Total PSE	US$ bn	36.52	33.50	29.82	30.88	35.70
Percentage PSE	%	74	70	66	67	71
New Zealand						
Total PSE	US$ bn	0.26	0.20	0.16	0.12	0.10
Percentage PSE	%	7	5	5	4	3
USA						
Total PSE	US$ bn	34.41	30.87	33.02	31.43	33.85
Percentage PSE	%	32	26	27	27	28
South Africa						
Total PSE	US$ bn	0.86	0.86	1.10	1.41	2.63
Percentage PSE	%	12	12	14	17	31

Source: OECD, 1993

Table 4 shows the total transfers to agriculture, as well as these transfers expressed as a percentage of per capita income, in South Africa (1993) and in some of the OECD countries (1992). Agricultural support in South Africa expressed as a percentage of per capita income, although lying third overall, correlates strongly with that of both Canada and the United States.

As mentioned before few will doubt the necessity of agricultural support in times of disasters. South Africa's most important grain products are maize and wheat, both of which are staple foods. These crops are cultivated largely

Table 4: Agricultural support as percentage of per capita income

Country	Per capita income Rand income	Agricultural support		
		Billion Rand	Rand per capita	Per cent of per capita income
Australia	42 124	4.56	254	0.6
Canada	55 575	25.94	941	1.69
EU	54 387	444.32	1 283	2.36
Finland	71 849	12.83	2 594	3.61
Japan	85 787	210.9	1 710	1.99
New Zealand	35 833	0.29	43	0.12
Switzerland	101 201	16.53	2 394	2.37
United States	68 585	256.64	1 026	1.5
South Africa	8 428	4.06	125	1.48

Source: China Post, 1994, Unisa, 1994, OECD, 1993

under dryland conditions since the scarcity of irrigation facilities. Periodic droughts, floods, hail storms, veld fires, pests and diseases makes farmers particularly vulnerable in the face of the current drought. Due to these dangers and instability, it is essential that farm management strive towards a strong financial structure and develop diversified farming enterprises in order to spread risk. Farming enterprises especially in the semi-arid regions need to be as flexible as possible, so that they can change course in response to changing climatic and economic conditions and take advantage of profitable opportunities as they arise.

The importance of agriculture is appreciated when natural disasters such as a drought strikes the country. The impact of a drought highlights the interaction of the agricultural sector with the rest of the economy, suggesting that agriculture's direct contribution of less than 5 percent of GDP does not truly reflect its role in the economy. The macro-economic impact of disasters has an effect on GDP growth, the availability of disposable income, the balance of payment position, food price inflation and most importantly on the vicious cycle of unemployment, rural-urban migration and food security both on regional and household levels.

In a recent World Bank comparative study of governmental policies affecting agriculture (Krueger, 1992) in 18 developing countries it is shown that in 16 countries farmers are taxed and exports are taxed more heavily than imports. This study provided systematic and consistent empirical estimates of the

effects of macro-economics and exchange rate policies and industrial protection as well as the sectoral policies affecting agriculture on the incentives for agricultural production and the incomes of farm people. According to Johnson (1994) it has all too often escaped notice of agricultural policy officials that protection of industrial products and overvaluation of the exchange rate act as taxes on agriculture and in most cases impose heavier burdens on agriculture than direct interventions such as export taxes, price ceilings and state procurements. The World Bank state of 18 countries found the net negative effect of direct price intervention was 8 percent of the value of output while the indirect taxes amounted to 22,8 percent (Shiff and Valdes, 1992). Obviously these enormous rates of taxation affected the growth of agricultural output negatively by between 14 and 52 percent according to the severity of the interventions (Shiff and Valdes, 1993).

On the other hand agricultural protection in the developed countries increased exports and/or decreased imports, depressed international market prices, increased instability of international markets and limited the market opportunities for farmers in the developing economies compared to a situation of free trade (Tyers & Anderson, 1992). The resulting high market prices and excess production was then disposed through export subsidies with no concern for the effects on the international markets. Of course, if this protection were expected to change in developed countries, the policy implications for developing countries might change.

Based on solid evidence of the characteristics of governmental price interventions in developing and developed countries, in the former governments exploited farmers for the benefit of their minority urban populations while in the latter governments attempt to be the benefactor of the farmer (Johnson, 1994). In the case of South Africa, as Merle Lipton's (1977) classic article aptly demonstrated, exist two agricultures. History suggests that in South Africa, a number of interventions in the markets for land, labour and capital produced a structure of incentives which induced scale efficiencies[3] favouring large scale farmers and limiting opportunities for small scale farmers. Yet, Van Zyl (1995) argues that larger farms are less efficient relative to smaller farms when social opportunity costs are used to determine the value of output instead of actual market prices. The reason for this stems mainly from the differences in the input mix of large and small farms. Van Zyl's study was conducted on commercial farms only, but this results are relevant for the global agriculture in connection with future economy-wide and agricultural policies, land reform and particularly support the abolishment of the Act on the Sub-division of Agricultural land Act (Act 70 of 1970) and the way in which it is applied presently.

According to the World Bank (1994) the themes that characterise agriculture's role in the broader economy can be summarised as follows: agriculture's present limited role in the economy can be explained by the dominance of the mining-industrial sector, the skewed distribution of natural resources, the adaptation of highly capital-intensive agricultural technology with the result of the reduction of employment and the objective of achieving self-sufficiency in major agricultural commodities.

The salient features of the macro-economic environment that have affected the agricultural sector are:

- *Declining growth and productivity*. In most sectors, policies favoured a capital-intensive production pattern. The increased investment in capital intensity, however, did not generate sufficient growth with the consequence that the total productivity of the economy declined over the last two decades. As a result of slow growth of real GDP the macro-economics environment facing agriculture was an especially unfavourable one;

- *Increasing unemployment and unequal income distribution*. Investment in capital intensity combined with policies that created homelands as labour reserves with the one of the objectives of keeping labour costs relatively low contributed to very high unemployment levels and political tensions. Labour-segregation policies resulted in a relatively unskilled labour force and extremely unequal distribution on income, services and demand. These forces have been instrumental in causing agriculture to move away from reliance on the relatively plentiful labour in favour of capital;

- *An inward-looking policy framework*. The government has created an intensive structure that encourages production for the domestic sector, rather than for international markets. Public sector policy strongly supported domestic producers through tariffs, quotas, and other barriers. As a result, many producers -- including agriculture -- are restricted to comparatively high-cost domestic sources of supply that reduce international competitiveness;

Public sector investment programmes was used as a means of compensating for declines in private sector investment. These investment have, however, often been undertaken with little regard to the social rate of return.

3.2 Monetary policy

Monetary policy is the deliberate action by the government to manage the money supply or the interest rate to achieve employment and income growth and distribution objectives. Monetary policies are usually focused on limiting the expansion of the money supply and domestic credit availability, and increasing savings. Measures to influence interest rates and restrict credit for certain sectors (often the public sector) and activities are part of this group of policies.

Monetary policy in South Africa forms part of a broader macro-economic policy, the prime objective of which is to improve the standard of living of the countries's people. The combination of monetary policy in accomplishing this objective is to create and maintain a stable financial environment by pursuing persistent and transparent monetary policies that facilitate decision-making and encourage business enterprise. To this end the South African Reserve Bank (SARB, 1993) stated the following goals:

- a rate of expansion in domestic bank credit extension that is consistent with the objectives of money supply growth;

- a market-determined level of sustained positive real interest rates in the medium and longer term;

- a relatively stable Rand exchange rate, reflecting underlying changes in the purchasing power of the Rand;

- well-functioning money, capital and foreign exchange markets that react with reasonable short time lags and in a consistent way to the changes in demand and supply conditions; and

- sound and efficient banking institutions to provide in the financial needs of the community.

Structurally, the proper execution of monetary policy in South Africa is curtailed by the following factors:

- a lack of fiscal discipline, which sooner or later results in inflationary financing of public expenditure;

- a trade union movement which often enforces higher wages without corresponding productivity improvements regardless of increasing unemployment;

- a weak currency subject to depreciation owing to large (politically induced) capital outflows; and

- a stringent system of exchange controls, which implies that local financial markets are not "disciplined" by the international capital markets and are accordingly easily to political pressure by the government (du Toit and Falkena, 1994:95).

Macro-economic policy has changed significantly from the 1980s. From 1945, the policies of the SARB had been strongly focused on demand management. In respect of monetary policy, the emphasis had substantially been on non-market instruments, notably at direct controlling the activities of the commercial banking sector (Dushmanitch, 1990). Institutional changes also took place: with the growing diversification of the financial sector, the Banks Act of 1965 brought non- bank financial institutions under the SARB's control. With the growing complexity of South Africa's financial markets, the emphasis on administrative control measures were seen as to rigid to adapt to rapidly changing circumstances.

Few studies have been conducted in South Africa on the effects of monetary policy on agriculture. According to Dushmanitch and Darroch (1989; 1990) the South African farm debt problem, interest rate variability and the depreciation of the Rand exchange rate, imply that the effect of monetary policy on the SA agricultural sector may be expected to be important. For example in modelling exercise (Dushmanitch, 1992) simulated the response of an expansionary monetary policy through a 15 percent annual increase in money supply on key endogenous variables linked to the maize and beef sectors. In the short run an increase in the money supply initially affects the general price level and exchange rate. The general price levels will rise due to increases in real income which cause consumers to increase spending on domestic goods. The exchange rate depreciates in response to increase consumer demand for imported goods.

Inflation and exchange rate effects of the expansionary policy, will be transmitted into the maize and beef sectors via impacts on agricultural input prices. Depreciation of the Rand exchange rate will raise the cost of imported component of machinery, implements, dips and sprays. Maize and beef supply could be expected to decrease as farmers react to the increased input

prices relative to product prices. An expansionary economy also lowers real interest rates which will cause maize supply to increase due to lower costs. Real beef supply will fall because lower interest rates reduce the cost of holding stock on the farm and encourage herd investment. Consumers will react to higher real incomes by reducing real *per capita* maize demand and increasing real *per capita* beef demand. Table 5 depicts the long term dynamic elasticities of key endogenous variables with respect to a one percent increase in money supply.

The long run elasticity the Consumer Price Index (CPI) indicates that a one percent increase in the money supply results in an 0,355 percent increase in the general price level. The long run elasticities of the maize and beef input prices associated with a one percent increase in money supply, reflect both inflation and exchange rate effects. Real maize supply shows a negative inelastic response (-0,202), indicating and inelastic response to increased in money supply. Real beef supply also falls when money supply increases, but the response is elastic (-1,376). Stock effects of the lower interest rate and cost effects of the higher price of dips and sprays reduce real beef supply. The net effect of an expansionary monetary policy is lower real gross income in the maize and beef sectors. These changes add to the instability faced by maize and beef farmers in general.

In a recent article (Naude, 1995) put the focus on agricultural prices relative to manufacturing prices. According to him, relative price changes can be potentially important in South Africa, not only for their effect on resource allocation and profitability, but also because they might influence the ability of farmers to anticipate future agricultural producer prices. It has been argued by Fényes et al, 1988 and van Zyl and Coetzee (1990) that food security policies often involve changes in relative prices, and that a key to designing effective food security policies is an understanding of how relative prices influence agricultural production.

Naude (1995) applied a partial-information rational expectations model and used regression analysis to determine whether or not unanticipated money supply had a significant impact on relative agricultural producer prices. It was found that in general, only real factors showed and influence, and not unanticipated money supply. This finding is in accordance with findings elsewhere (Kretzmer, 1989, Lapp 1990 as quoted by Naude 1995). Naude (1995) also found however, that the narrowly defined anticipated money supply, M1, had a negative effect on relative agricultural prices through a substitution effect away from agriculture towards manufacturing especially in the long run. In the short run this also may happen through increasing the

costs of inputs as a result of the depreciation of the exchange rate. To eliminate this bias against agriculture it is necessary to desegregate agricultural producer prices and price setting mechanisms currently in force.

Table 5: Dynamic elasticities of the key endogenous variables in respect of a one percent change in money supply

Endogenous variable	
Consumer price index	0,330
Exchange rate	1,343
Price of machinery and	0,668
Price of dips and sprays	0,444
Real maize supply	-0,202
Real beef supply	-1,376
Real per capita human maize demand	-0,208
Real per capita beef demand	0,755
Real animal maize demand	0,679
Real agricultural income beef and maize)	-0,666
Real agricultural	-0,256

Source: Dushmanitch, 1992

3.2.1 Interest rates

Governments use macroeconomics policies to influence inflation, provide incentives, and distribute income. Three prices – interest rates, foreign exchange rates, and wage rates – have major effects on the macro-economy and can be manipulated by government. These prices are all determined by supply and demand conditions in their respective markets. If the government manipulates them, conditions for excess supply and demand can result.

Adjustment of the interest rates as an active instrument of monetary policy has important implications for agriculture, through direct impact of the cost of credit and of capital, indirectly through input costs via manufacturers' costs.

A Commission of Enquiry into the Monetary System and Monetary Policy (the De Kock Commission) was appointed in 1977, as a result of its findings a more market-oriented approach was adopted, allowing the financial markets to operate more competitively, and with the corollary that interest rates were more competitive, more market related, and rose in real terms as illustrated in Table 6 and Figure 1.

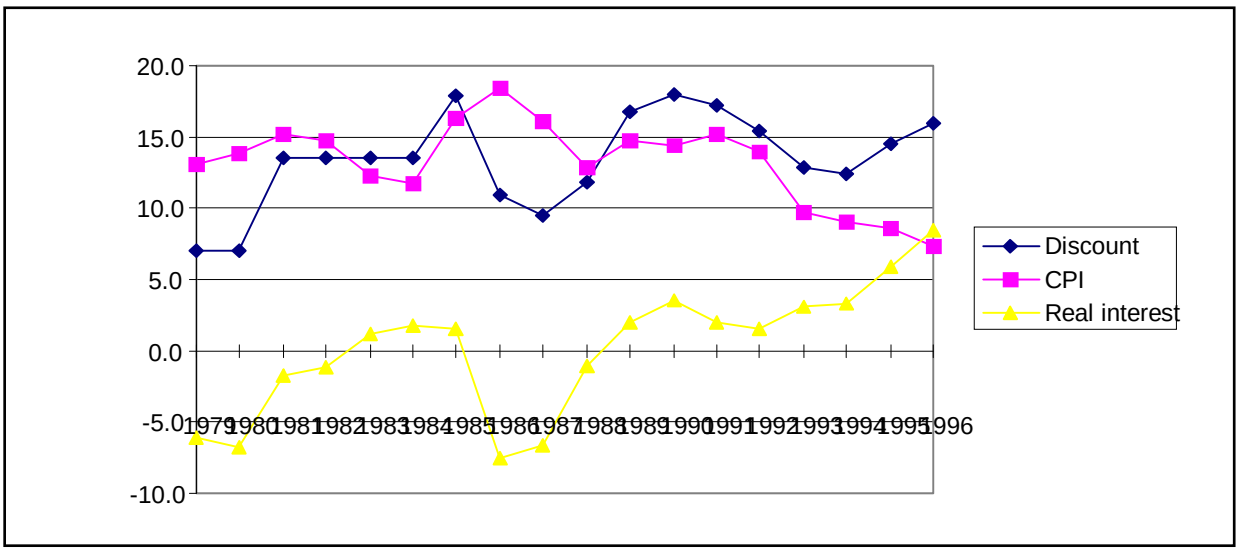

Figure 1: Trends in nominal and real interest rates, 1979-1996
Source: South African Reserve Bank, 1996

Table 6: Trends in nominal and real interest rates, 1979-1996

Year	Discount rate (%)	CPI	Real Interest rate (%)
1979	7,0	13,1	-6,1
1980	7,0	13,8	06,8
1981	13,5	15,2	-1,7
1982	13,5	14,7	-1,2
1983	13,5	12,3	1,2
1984	13,5	11,7	1,8
1985	17,9	16,3	1,6
1986	10,9	18,4	-7,5
1987	9,5	16,1	-6,6
1988	11,8	12,9	-1,0
1989	16,8	14,8	2,0
1990	18,0	14,4	3,6
1991	17,2	15,2	2,0
1992	15,4	13,9	1,5
1993	12,8	9,7	3,1
1994	12,3	9,0	3,3
1995	14,5	8,6	5,9
1996	15,9	7,4	8,5

Source: South African Reserve Bank, 1996

The impact of this trend on the agricultural sector has been exacerbated by the simultaneous progressive liberalisation of interest rates since the late 1970s which has led to a reduction in the availability of subsidised loans through the Land Bank. On aggregate, interest payments are the second largest item of agricultural costs; higher real interest rates have been one of the main factors contributing to the financial crises in the farm economy. According to the President's Economic Advisory Council of the previous government more than 31 per cent of the increase in the agricultural debt between 1980 and 1985 could be attributed to interest rate movements. High nominal rates coinciding with the prolonged drought during the 1980s has contributed to the growth of farming debts and cash flow problems.

The rise in nominal rates in the early 1980s was accompanied by a still more rapid rise in inflation, which meant that, in real terms the interest payable by farmers was negative. It was therefore sensible to increase, rather than reduce, borrowing. This has been encouraged further by the ready availability of credit from banks and coops; by the basis on which income tax for farmers has been calculated and the relatively low cost of credit available to farmers. Since 1988 however, the monetary authorities have implemented a policy of positive real interest rates to curb inflation. That is, interest rates are kept above the inflation rate at all times

The borrowing encouraged by very low positive or negative real interest rates has pushed land prices up above the productive values of land throughout the 1980s and early 1990s - only recently has the land prices moved closer to the productive values of land.

Interest rates also impact on agriculture through inventory behaviour (stock effects). Higher interest rates raise the cost of inventory investment, causing stocks to be run down. In other words, as the interest rate rises, so does the return on off-farm interest-bearing assets. The opportunity cost of herd investment (cattle numbers) therefore increases as the interest rate rises resulting in inventory investment decreasing.

Low interest rates have also encouraged the purchase of machinery and implements. Broadly speaking, mechanisation on farms seems to have been labour-complementing prior to 1970. Post-1970 it seems to have been labour-substituting. It seems more than probable that there were a degree of over-mechanisation. Thirtle, van Zyl & Von Bach (1993) however, showed that this over-mechanisation became less significant after 1983. A SAAU survey showed that commercial farmers most deeply in debt usually have invested twice as

large a proportion of their capital in machinery and implements as those least in debt. The negative real interest rates experiences in the early 1980's have brought about a higher level of borrowing than would otherwise have occurred.

3.2.2 Inflation (cost effects)

Inflation affects farmers through cost price squeeze where margins between input costs and producer prices become progressively smaller. This is due to input costs rising faster than producer prices or producer prices rising at a slower rate than input costs.

In South Africa, inflation has been largely attributed to non-economically motivated increases in wages and salaries in excess of increases in labour productivity. Since the agricultural sector derives a significant proportion of its inputs from the non-agricultural sector, inflation is easily passed on to the agricultural sector through these linkages. The oligopolistic structure and protection of the local input manufacturing industry has contributed to higher (than imported) agricultural input costs.

4. CONCLUSIONS

Agricultural policy in South Africa since the second world war was characterised by institutional multiplication with attendant fiscal costs and internal barriers to trade, huge regional and consequently racial imbalances in respect to access to land support services and productivity. Agriculture as a whole was successful in creating surpluses but imbalances remained endemic. From the main provisions of the 1995 White Paper on agriculture it is obvious that further deregulation and a shift to the small farmer philosophy is eminent. The question is that will this turnabout in farm policy on its own be successful or will it need the co-operation of macro-economic policies to succeed? The macro-economic and sectoral issues discussed point to a difficult road ahead and call for pragmatic rather than dogmatic approaches.

NOTES

1. Distortions with regard to interest rates specific to large and small farmers has been removed and depends only on the credibility of the borrower regardless of farm size. No evidence of water tariff discrimination favouring large farmers could be found since water rights were coupled with land rights. The application of the subdivision of Agricultural Land Act (Act no 70 of 1970) within areas of jurisdiction of councils which have been established in terms of the Local

Government Transition Act, (Act no 209 of 1993), has not been assigned to competent authority within the nine provinces and is therefore still administered at National Government level.

2. According to Lipton (1996) prices and institutions were so rigged that a bogus appearance was given of greater efficiency on larger than on smaller farms.

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