SOUTHERN AFRICA: FOOD SECURITY POLICY OPTIONS

Correct citation:
Mandivamba Rukuni and Richard H. Bernsten, eds. 1988. *Southern Africa: Food Security Policy Options.* Proceedings of the Third Annual Conference on Food Security Research in Southern Africa. 1-5 November, 1987. University of Zimbabwe/Michigan State University Food Security Research Project, Department of Agricultural Economics and Extension, Harare.

SECTION 2: MARKET LIBERALISATION AND FOOD SECURITY

EFFECTS OF MARKET LIBERALISATION ON FOOD SECURITY IN TANZANIA
H.K.R. Amani, S.M. Kapunda, N.H.I. Lipumba, and B.J. Ndulu — 65

MARKET LIBERALISATION AND FOOD SECURITY IN MALAWI
B. Kandoole, B. Kaluwa, and S. Buccola — 101

MARKET LIBERALISATION IN ZIMBABWE: THE CASE OF SUBSIDIES, 1980 - 1987
R. Davies — 123

MARKET LIBERALIZATION AND FOOD SECURITY IN MALI
J. Dione and J. Staatz — 143

SECTION 3: HOUSEHOLD FOOD INSECURITY IN SORGHUM BASED FARMING SYSTEMS IN THE SADCC REGION

MAJOR ISSUES IN DESIGNING A RESEACH PROGRAMME ON HOUSEHOLD FOOD INSECURITY
M. Rukuni and R.H. Bernsten — 173

TRADITIONAL HOUSEHOLD STRATEGIES TO COPE WITH FOOD INSECURITY IN THE SADCC REGION
L.M. Zinyama, D.J. Campbell, and T. Matiza — 183

THE STATE OF THE ART OF SORGHUM RESEARCH FOR COMMUNAL FARMERS IN ZIMBABWE
J.N. Mushonga — 207

HOUSEHOLD FOOD INSECURITY IN LOW-RAINFALL AREAS OF ZIMBABWE: INITIAL FINDINGS IN MUDZI, MUTOKO, AND BUHERA COMMUNAL AREAS.
G. Mudimu, C. Mbwanda, S. Chigume, and J. Govere — 217

ACKNOWLEDGEMENTS

This proceedings of the Third Annual Conference on Food Security Research in Southern Africa is the product of close cooperation between social scientists, technical scientists, government officers, and donor agencies in Southern Africa. The studies reported in the proceedings are part of a comparative analysis of food security in Sub-Saharan Africa that is directed by Michael Weber of Michigan State University's Department of Agricultural Economics. The UZ/MSU food security research programme is being carried out through a sub-contract with Michigan State University.

In the Ministry of Lands, Agriculture, and Rural Resettlement, we acknowledge the generous support provided by Sam Muchena and John Dhliwayo who are responsible for the close collaboration between the food security research project and the SADCC Food Security Technical and Administrative Unit--responsible for developing and managing SADCC's Food Security Programme. They have been particularly helpful in identifying relevant research themes that complement the SADCC programme.

The research supporting the preparation the proceedings papers was financed by the U.S. Agency for International Development, Bureau of Science and Technology; Bureau for Africa; and the Southern Africa Regional Programme; under a *Food Security in Africa* cooperative agreement (DAN-1190-A-00-4092-00) with the Department of Agricultural Economics, Michigan State University and a sub-contract with the Department of Agricultural Economics and Extension, University of Zimbabwe. We are grateful to the following present and former USAID officials for their support to the project's efforts to strengthen indigenous research capacity for food security policy research: Don Anderson, Curt Reintsma, Thomas Mehen, Calvin Martin, David Atwood, Ernesto Lucas, Michael Yates, Roy Stacy, Dale Pfeiffer, Pamela Hussey, and Janet Schulman. We are particularly appreciative of the support provided by Allison Herrick, Eric Witt and Joshua Mushauri of the Southern Africa Regional Programme, Harare.

We convey special thanks to Thembi Sibanda for an excellent job in organizing the Third Annual Conference, and to the many individuals who helped to make the conference a success: Murie Hutchison, Lovemore Nyabako, Maxwell Chiwashira, Samson Maguhudze, George Nyamatemba, Ronald Sagwete, Pete Hopkins, and Andrew Barnes.

We are especially indebted to Mrs. Corinne Smith for her patience, skill, and dedication in word processing the numerous drafts of the chapters included in this proceedings. Her persistence in mastering the word processing and laser printer technology has been exceptional.

Finally, we thank Chris Wolf and Elizabeth Bartilson for providing technical support for the laser printing technology used to print the proceedings.

MARKET LIBERALISATION IN ZIMBABWE: THE CASE OF SUBSIDIES, 1980-1987

R. Davies[1]

INTRODUCTION

The foundations of the current Zimbabwean economy were, to a great extent, laid in the 15 years following the *Unilateral Declaration of Independence* (1965 to 1980). During this period, there was considerable industrial development and diversification of the economy, both between sectors and within sectors. For example, the virtual monocrop orientation of commercial farming before *UDI* was reduced with the value of tobacco marketed falling from around 70% of marketed crops in 1965 to about 30% in 1980.

These changes took place in an economy with both a high degree of protection through sanctions and a high degree of state intervention and regulation. In many ways, it was a textbook example of the dirigiste economy against which the currently fashionable arguments for liberalization are directed.

Independence brought with it some liberalization. The removal of sanctions is conventionally credited with reducing import prices by 10% and raising export prices by a similar amount. Government also adopted a more relaxed attitude towards the allocation of foreign exchange, mainly under the stimulus of expected capital inflows under the Zimbabwe Conference on Reconstruction and Development. This opening up of the economy would, I presume, be regarded as a good thing by proponents of liberalization.

However, while this was taking place, government also continued, or adopted, policies which ran counter to the liberalization argument. It strengthened the minimum wage system and intervened more directly in the labour market, effectively eliminating collective bargaining. Although interest rates were raised, the inherited financial repression was maintained and controls over financial institutions were tightened. The price control system was maintained and strengthened. After 1982, as the economy moved out of the post-independence boom, government responded by attempting to regulate the economy even more (ie., by progressively increasing controls on the invisible and capital accounts of the balance of payments).

[1]Department of Economics, University of Zimbabwe.

Thus, it is questionable whether, on balance, there has been any liberalization in Zimbabwe. Currently, there is a growing debate on the issue, most publicly between the pro-liberalization forces of the World Bank and Professor Hawkins[2] on the one hand, and the Confederation of Zimbabwe Industries and part of the government on the other hand. No clear policy has yet emerged from this debate, let alone any concrete actions. Therefore, it is premature to review the liberalization experience of Zimbabwe since 1980, as I was asked to do in this paper.

The only area in which liberalization has occurred is with respect to subsidies. Almost from independence, there has been a widespread belief that government needed to cut the level of budget subsidies. Government has shared this belief and has made some attempts to actually reduce them. Therefore, this paper concentrates solely on the question of subsidies and, more specifically, food subsidies.

REVIEW OF THE SUBSIDY DISCUSSION SINCE INDEPENDENCE

This section argues that since independence a conventional wisdom on food subsidies has emerged. A few key contributions to the debate are reviewed along with how the arguments are reflected in official government statements.

Callear's contribution

The first detailed contribution to the post-independence debate on subsidies was a paper presented by Diana Callear at a conference on rural development, organised by the Zimbabwe Economic Society in May 1981 (Callear, 1981). This paper remains one of the most comprehensive statements, in terms of its attempt both to raise issues and to establish a theoretical framework for discussions.

Apart from her attempt to clarify some of the theory of subsidies, Callear made some specific observations on the operation of the subsidy system in Zimbabwe. Several of her points are reflected in later contributions to the debate and have become part of the conventional wisdom. Her main concern was with the mistargeting of food subsidies. She concluded that "the main beneficiaries of producer subsidies as they stand are the large producers. The main beneficiaries of the various consumer subsidies are not as clearly defin-

---

[2]Department of Business Studies, University of Zimbabwe.

ed, but they are generally the urban salary and wage earners, who are certainly not the poor" (Callear, 1981; p. 12).

A second concern of Callear's paper was with the negative impact of subsidies on the peasant sector. She argued that the low consumer price of food implied by the subsidies reduces peasants' food production, encourages greater producer sales to the Grain Marketing Board (GMB), and encourages farmers to switch from producing food crops to nonfood crops. She argues that all of these effects reduce rural food security in the long-run, although rural consumers might benefit from the lower prices in the short-run. Finally, although Callear mentioned in passing the implied financial burden of the growing subsidies, she did not examine this aspect in detail.

Therefore, on balance, Callear's analysis was critical of Zimbabwe's blanket subsidy system. She suggested that more selectively-targeted interventions would be more efficient and concluded that the "large savings to the exchequer of abandoning the system could well be used to increase the rate of redistribution through speeding up the land reform programme" (Callear, 1981; p. 15).

The Riddell Commission

It is unclear how much direct impact Callear's paper had. The first widely noticed contribution to the debate was by the Riddell Commission. It's report (June 1981) raised several criticisms of subsidies (Zimbabwe, 1981; pp. 67-69, 190-195). It argued that a low food price policy adversely affects the incomes of food producers and that subsidies on some products can reduce incomes of those producing competing products. It demonstrated that subsidies were badly targeted, using Callear's illustration that an estimated Z$5 million per year was spent to subsidize beef consumption by pets.

The commission emphasized the difficulty of financing subsidies and the growing burden they were placing on the government budget. Finally, they argued that subsidizing maize meal could have negative employment and nutritional consequences, since it favoured modern roller mills against traditional rural millers.

The commission raised only two specific advantages of subsidies. First, it suggested that subsidies might be used to transfer income to food producers by raising producer prices above market-clearing levels, which has food security consequences. Second, it argued that subsidies convert the "residual buying role" of marketing boards into monopsonies. This can be beneficial by providing more stability, except where the boards become excessively bureaucratic.

The commission explicitly recommended that government gradually phase out the blanket subsidies on foodstuffs. It argued that "the most effective, permanent, and least costly method of protecting consumers from rising food prices is to ensure that their incomes are sufficiently high to allow these prices to be paid" (Zimbabwe, 1981; p. 193). This captures the underlying view of the commission, that although subsidies can be used to protect the poor, they are unnecessary where the poor have the power to protect their incomes. (In this case, food subsidies can be an indirect subsidy of wage bill.) The commission observed that food prices in Zimbabwe were among the lowest in Africa and that Zimbabweans must realize that these low prices are unsustainable in the long-run.

The Chavunduka Commission

The Riddell Commission's criticisms of subsidies were echoed by the 1982 Chavunduka Commission (Zimbabwe, 1982a; pp. 137-139). It argued that the financial burdens imposed by high subsidies inevitably led to massive, disruptive, and often uncontrolled price increases; that producer prices are set at unrealistically low levels in order to relieve this financial burden, leading to food shortages and balance of payments problems; and that subsidies favour urban consumers and provide little benefit to the vast majority of rural dwellers who produce their own food. Therefore, they recommended that government phase out consumer subsidies on agricultural products as rapidly as possible.

The main difference between the two commissions was that the Chavunduka Commission recommended replacing blanket subsidies, where necessary, with more carefully targeted welfare measures; while the Riddell Commission recommended not only such measures, but also additional measures to raise incomes to allow consumers to pay the higher prices.

The Jansen report

In a paper written for USAID, Doris Jansen presented a more extended technical analysis of agricultural prices and subsidies in Zimbabwe (Jansen, 1982). She compared domestic and border prices for Zimbabwe's major agricultural products to determine the extent of implicit subsidies and taxes for both consumers and producers.

Jansen found that groundnuts were the only crop where producers had been and were currently taxed[3] (i.e., producers were paid considerably below the border price). She pointed out that this was the major strength of pricing policy in Zimbabwe, avoiding problems that had arisen elsewhere in Africa. However, in her view, it also reflected a serious shortcoming, in that prices were to too great an extent based upon considerations of com-

---

[3] I believe that these findings were broadly substantiated in a later paper by Thomson, although I have not examined that paper (Thompson, 1985).

mercial farmers' costs of production. Thus, she recommended switching to using border prices as a basis for price setting (Jansen, 1982; p. 24).

As far as consumer subsidies were concerned, Jansen argues that a major change was required immediately. The high subsidies imposed an unbearable strain on the government's budget; they led to artificially high demands for the subsidised products which rendered food self-sufficiency a constantly receding target; and the subsidies widened the real income gap between urban and rural dwellers.

These papers and reports raise similar themes and were all critical of the blanket subsidy system in Zimbabwe. Their main criticisms were that the subsidies imposed too great a burden on the exchequer; that the system was, at best, badly targeted and inequitable; and that they probably had a negative impact on peasant households or on food security in the communal areas.

Official government statements

The conventional wisdom against subsidies summarized above has been accepted by government, as reflected in a number of official documents and statements.

The *Three-Year Transitional National Development Plan* noted that although pricing policies had enabled Zimbabwe to attain food self-sufficiency and to keep food prices low (especially for urban consumers), these achievements had considerable costs. These included "the relative neglect of the communal areas, the inequity of the food subsidy policy, some economic inefficiency arising from the fact that pricing policy was primarily determined on the basis of commercial farmers' production costs, and a heavy burden on the Treasury from what is evidently an inequitable food subsidy policy" (Zimbabwe, 1982b; p. 68).

In his 1984 budget speech, Dr. Chidzero emphasised the strain subsidies were imposing on the budget, although his remarks appear aimed more explicitly at nonfood subsidies (Zimbabwe, 1984; pp. 30-33). In 1985 he argued that the reduction/removal of subsidies on certain foodstuffs had been necessary because of "the implications on the size of the budget, and the fact that subsidies do not necessarily benefit those who most need assistance. An additional factor contributing to increases in food prices has been the need to encourage food self-sufficiency, through increased production" (Zimbabwe, 1985; p. 8).

BACKGROUND TO SUBSIDIES AND PRICE CONTROLS IN POST-INDEPENDENCE ZIMBABWE

Before evaluating the conventional wisdom identified in the previous section, it is useful to provide some background to subsidies in post-independent Zimbabwe.

The structure of subsidies

Table 1[4] provides the budgetary setting for subsidies since independence and shows that although food subsidies are significant, they are not the major portion of the subsidy/transfer budget. While subsidies to parastatals such as the Zimbabwe Iron and Steel Company, National Railways of Zimbabwe, and Air Zimbabwe have all been significant; grants by the Ministry of Education to private schools probably constitutes the biggest single transfer. Interest payments have also been growing rapidly.

Turning more specifically to food subsidies, the first point to emphasise is that we are considering such subsidies within a general system of price controls. The subsidies are paid on administered prices, not market determined ones. Apart from general price controls which include the current price freeze, there are specific controls relating to food and food producers. Government sets both the producer and the consumer prices of controlled products, which include most basic foodstuffs. In addition, government sets the prices of some inputs such as fertilizer, electricity, coal, and railway transport. In practice, the price controls on food are probably the most effective of the whole price control system.

The main agricultural products subject to price control are maize, sorghum, groundnuts, soyabeans, wheat, and coffee which are all traded by the Grain Marketing Board; cotton, traded by the Cotton Marketing Board; beef and sheep, traded by the Cold Storage Commission; and milk and diary products, traded by the Diary Marketing Board. Both producer and wholesale prices for these products are set by the government through the Agricultural Marketing Authority (AMA). Where the wholesale price is set in relation to

---

[4]In constructing this table, repayment of borrowings were offset against new borrowings, so the totals do not correspond with those in published government sources. Because this reduces overall disbursements, it makes the shares of components higher than they might otherwise be. Nevertheless, it is a reasonable way to present government finances.

Table 1. Food subsidies in relation to other components of central government budget, Zimbabwe.

Item	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
Millions of Z$ (Nominal Terms)								
Goods and Services	598.6	763.3	910.1	1053.1	1111.8	1346.1	1674.7	2278.5
Total transfers	538.5	685.7	909.9	1770.2	1326.3	1559.2	1877.3	1588.4
Food subsidies	68.7	122.1	126.5	64.5	149.7	155.0	168.5	210.1
Other subsidies	297.4	346.6	507.6	760.5	739.3	880.8	1080.9	612.3
Other transfers	172.4	217.0	275.8	345.2	437.3	523.4	627.9	766.0
Other expenditure	144.6	231.9	426.4	394.5	481.7	389.8	501.3	748.7
DISBURSEMENTS (TOTAL)	**1281.7**	**1680.9**	**2246.4**	**2617.8**	**2919.8**	**3295.1**	**4053.3**	**4615.6**
Revenue	1000.2	1359.1	1765.0	1943.6	2131.7	2519.3	2953.9	3478.0
Deficit	-281.5	-321.8	-481.4	-674.2	-788.1	-775.8	-1099.4	-1145.6
Aid net borrowing	0.0	5.4	24.2	56.9	81.1	99.5	102.5	158.0
RECEIPTS (TOTAL)	**1281.7**	**1680.9**	**2246.4**	**2617.8**	**2919.8**	**3295.1**	**4053.3**	**4615.6**
Percentage of Total Disbursements								
Goods and services	46.7	45.4	40.5	40.2	38.1	40.9	41.3	49.4
Total transfers	42.0	40.8	40.5	44.7	45.4	47.3	46.3	34.4
Food subsidies	5.4	7.3	5.6	2.5	5.1	4.7	4.2	4.6
Other subsidies	23.2	20.6	22.6	29.1	25.3	26.7	26.7	13.3
Other transfers	13.5	12.9	12.3	13.2	15.0	15.9	15.5	16.6
Other Expenditure	11.3	13.8	19.0	15.1	16.5	11.8	12.4	16.2
DISBURSEMENTS (TOTAL)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Revenue	78.0	80.9	78.6	74.2	73.0	76.5	72.9	75.2
Deficit	-22.0	-19.1	-21.4	-25.8	-27.0	-23.5	-27.1	-24.8
Aid	0.0	0.3	1.1	2.2	2.8	3.0	2.5	3.4
Net borrowing	22.0	18.8	20.4	23.6	24.2	20.5	24.6	21.4
RECEIPTS (TOTAL)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Ratio to GDP (Market Prices) of (%):								
Food subsidies	1.86	2.64	2.34	1.03	2.12	1.85	1.78	2.02
Budget deficit	7.63	6.97	8.91	10.75	11.18	9.25	11.61	11.00
Gross borrowings	12.17	11.18	14.54	13.84	14.23	11.92	16.40	14.37

Source: Zimbabwe, (various dates a, b)

the producer price so the responsible authority is unable to cover its costs, the losses are paid out of the central government budget. These subsidies have risen considerably over the years. There were also subsidies paid by government to private food processors which are related to maize meal, flour, edible oils and opaque beer.

Table 2, which summarises the allocation of food subsidies since independence, shows that the subsidies to private firms have been phased out. However, those to marketing boards have continued and have grown in nominal terms, despite some fluctuations.

Several features of the subsidy system need to be highlighted.

- It is difficult to calculate the precise quantitative impact of subsidies on consumers because of the way they operate. Producer and consumer prices are set and the relevant marketing board incurs losses. The precise loss is only known some years later after auditing. Thus, the subsidy appearing in the annual budget actually covers losses incurred some years earlier. For example, the Z$2.5 million maize meal subsidy in 1986-87 actually related to outstanding losses from previous years.
- Because prices are set at the start of the agricultural season, it is impossible to know precisely how much the subsidy will be. Indeed, because losses are only reflected in the budget several years later, it is impossible to know what level of subsidy was required--until some years after the season concerned.
- The system is likely to be pro-cyclical. The better the season, the higher the marketing board's losses. Therefore, the AMA will have to borrow more in the money market to finance its operating costs, which should push up aggregate monetary demand in years in which it is already high. In bad seasons, the opposite is true.
- Because of the lag between when the loss is incurred and it entering the central budget, there is no obvious connection between the state of the economy and the impact of subsidies on aggregate demand.

Impact of subsidy reduction on consumer prices

Attempts to reduce subsidies have been accompanied by sharp increases in administered consumer prices. For example, the price of roller meal was raised by 50% in 1982 and a further 40-45% in 1983. Beef prices were raised by 30% in 1982 and up to 55% in 1983. The same pattern of relatively sudden increases applies across the board to the controlled products. In fact, this was one of the grounds on which the Chavunduka Report criticised subsidies--that they would lead to periods of stagnant prices followed by sudden and sharp increases as the financial burden became too great. While all of the critics argued that government should phase out subsidies in an orderly manner to avoid sudden price hikes, this advice does not seem to have been

Table 2. Food subsidies in Zimbabwe, 1980-81 to 1987-88 (Z$ million)

Item	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
To marketing boards:								
Beef	9,619	25,730	33,289	36,518	41,630	39,283}	}	
Dairy	4,110	10,354	18,329}		31,682	39,329}	}	
Maize	9,662	5,110	22,910}	86,000[a]	36,719	43,731}	166,000[a]}	210,101[a]
Soya	1,919	956	0 }		4,608	1,608}	}	
Wheat	0	0	0	0	11,638	9,173}	}	
Sorghum	0	0	0	0	1,400	581}	}	
Total	25,310	42,150	74,528	122,518	127,676	133,715	166,000	
To private firms:								
Bakers flour	6,663	8,500	1,939	0	0	0	0	0
Edible oils	5,700	6,200	0	0	0	0	0	0
Maize Meal	20,150	64,800	49,186	28,000	22,000	15,000	2,500	0
Opaque beer	1,048	400	0	0	0	0	0	0
Total	33,567	79,900	51,125	28,000	22,000	15,000	2,500	0
Total food subsidies:	58,875	112,050	125,653	150,518	149,676	148,715	168,500	210,101

[a]Data not available by category. This value is the total for categories to the left of the numbers.
Source: Zimbabwe (various dates, b)

followed. Thus, in September 1983 when the first major round of subsidy removals was made, the food price index for low income families rose by 26.9% over its August level.

Producer or consumer subsidies

The final general issue is the extent to which the subsidies are producer or consumer subsidies. Callear, Jansen and Thomson (Callear, 1981; Jansen, 1982; Thomson, 1985) have addressed this topic, so I will only highlight the theoretical issues.

The question of who is being subsidised hinges on what the price of the product would be in the absence of the subsidy. In a free market system, the reference price would be the market clearing price. We would normally expect the subsidy to be shared between producers and consumers, unless supply or demand is perfectly inelastic. This sharing is independent of to whom the financial subsidy is paid to in the first instance.

Because we do not have a free market, the normal choice is to take the border price as the reference price, arguing that the border price reflects the opportunity cost of the product concerned. Because of the assumption of perfectly elastic world demand and supply, this procedure ends up with the entire (implicit) subsidy going to either consumers (controlled price below border price) or producers (controlled price above border price)--unless there are separate producer and consumer prices.

Border prices are widely used as reference prices. However, we should note the following. First, at a theoretical level there is reason to question the extent to which policy makers should take border prices as shadow prices. In theory, shadow prices are the dual of the objective function from which a constrained optimum allocation of resources can be derived. It is not intuitively obvious that a national objective function would give rise to a set of shadow prices that coincides with the set of border prices--particularly if that objective function includes a distributive component and we do not assume that perfect redistribution is possible. Of course, this argument applies equally to the use of some notional market clearing price as a reference price.

Second, if all price controls were removed so that the market became a free market, the market clearing price would not be the current border price. At the very least, we have to calculate what changes in the exchange rate that complete liberalization would imply.

Third, at a practical level, it is problematic whether we use import parity or export parity prices as the border price. Although a rule of thumb is used--it depends whether the good is imported or exported--I am not sure that it is quite so clear cut.

Thus, there is always some basis to criticise empirical attempts to measure implicit subsidies. As reported above, Jansen and, I believe, Thomson calculated that producers are generally paid above the appropriate border price; so it could be argued that they are subsidised. I am not sure how far the Commercial Farmers' Union would agree.

An interesting avenue for some further work arises from the fact that a subsidy to producers operates rather like a devaluation. Because of the subsidy, the domestic producer price can be that much higher than foreign competitors, before they are unable to compete. A devaluation has the same effect. Calculating the equivalent devaluation needed to give the producers the equivalent level of protection that they currently get through the subsidies might provide further insight into the requirements of a liberalization process.

OBSERVATIONS ON THE SUBSIDY DEBATE

Since there are some recurring themes in the criticisms of subsidies, we can speak of a conventional wisdom on the subject. The main components of this conventional wisdom are that the economy, and more precisely the budget, cannot sustain the burden which subsidies are placing on them (the macroeconomic/fiscal critique); and that subsidies are inefficiently targeted, are inequitable, and may even harm the rural poor (the mistargeting critique). The rest of this paper is structured around these two main issues. To provide a more specific focus, I will keep in mind the question of food security and subsidies, although sometimes my argument will be more general. Before looking at each of these critiques, I wish to make some general points concerning the approach to food security.

Appropriate food security concerns

As an outside observer of the food security debate, it appears that the concerns of the experts have broadened. Initially, the concern was at a relatively aggregate level, with a tendency to regard food security as a national question--does the country produce a surplus or not? More recently researchers have recognized that a national surplus is not a sufficient condition to ensure that people do not starve. The currently accepted definition of food security seems to be "access by all people at all times to enough food for an active, healthy life" (World Bank, 1986; p. 1). This places emphasis not only on the household level, but also on income distributional--rather than simply income generational-issues. Thus, research interests have shifted away from national issues towards household and intra-household questions.

This trend is correct. Indeed, I expect and wish it to go further to consider some of the intrahousehold issues being raised in the literature on women in development. But we clearly need to be careful not to throw out the baby with the bath water. National issues are important. I am not thinking simply of questions such as storage, transport, and other infrastructural issues which are still being examined; but the whole range of macroeconomic issues, stabilisation, and trade policies etc. which impact on the level and distribution of incomes. Macroeconomic management of the economy can have as great an impact on incomes and income distribution as, for example, drought and rain.

Clearly subsidies impact on food security through both their microeconomic impact on resource allocation and their macroeconomic impact through the budget and balance of payments. Therefore, we need to locate the households we are studying in the overall economic framework.

Second, there appears *de facto* to be a tendency to regard food security issues as primarily the concern of agricultural economists. When someone says they are conducting research on food security, one immediately has a picture of them working on something to do with peasant households, or at least in rural areas. Of course, this is not a universal tendency. We do find literature reference to the urban unemployed or the urban informal sector, but these groups are not a major focus of food security researchers.

Discussions of food security must include urban workers for several reasons. First, although there is a tendency to dismiss them as being among an elite who have no problems of poverty, this is not true. Second, there are important linkages between the sectors, with members of the same household operating in both. Since policies which directly impact on urban workers indirectly impact on rural households as well, there needs to be a component of food security research which looks specifically at urban households.

To properly examine these issues, one must use a relatively formal model of household behaviour, distinguishing between different categories of household and locating them within the broader framework of the economy. Some of the data needed for such an exercise can be drawn from the household survey work being done by the Central Statistics Office, the Zimbabwe Institute of Development Studies, and individual researchers such as Jeremy Jackson and Jayne Stanning. With the decision by the Central Statistics Office to build a social accounting matrix for Zimbabwe, we hope to obtain some of the data needed to put these micro surveys into an internally consistent picture of the economy. However we will still need a lot of work and debate to formulate appropriate models for the data.

Since we do not yet have this analytical apparatus, most of what I wish to do is very speculative and based on prejudged speculations about what I think the data shows. However, I hope it may stimulate some ideas, even if only because I am wrong. Let me now consider each of the two conventional critiques I referred to above.

The macroeconomic/fiscal critique

Formerly, students of macroeconomics were told that subsidies were a form of transfer payments. Therefore, they had no macroeconomic consequences, unless there were differences in the marginal propensities to consume of the groups between whom the transfer was being effected. In that case, a transfer from rich-to-poor would raise the consumption level and reduce the savings level for any given level of national income. But in the absence of such differences, this old (Keynesian) approach simply tells us to net transfers out of the public accounts and ignore them.

A more sophisticated Keynesian approach acknowledges tax revenue constraints and point to the opportunity costs operating between different items on the expenditure side of the budget. This, for example, underlies the critique raised by Callear when she argued that the subsidy programme diverted money away from the resettlement programme which would have more directly treated the problem of rural poverty. While this is analytically correct, we need to use a political economy approach to government expenditures to understand whether or not it is applicable to Zimbabwe. Using the hindsight that was denied to Callear, there are some grounds for questioning whether any monies saved from subsidy removal would have been channelled into a more vigorous land resettlement programme. As with all alternative proposals, we must be satisfied not only that they are theoretically preferable; but also that they are likely to be introduced, given the political and economic realities. I think that this runs through the whole debate. It could be argued that government has accepted the advice to cut subsidies without adequately implementing alternatives that have been put forward.

The more modern macroeconomic critique of subsidies focuses on their monetary consequences. They are seen as contributing to the deficit and thus to government borrowing and monetary expansion. More precisely, this approach does not distinguish between categories of government outlay, as far as their consequences on the deficit are concerned.

Since this is not a paper on monetary theory, let us accept that government deficits do increase the money supply. The importance of food subsidies is then an empirical question. How important in fact are food subsidies in contributing to the government's deficit in Zimbabwe? Table 1 shows that in the post-independence period, food subsidies amounted to between 2.5% and 7.3% of expenditure. (We could make this figure lower by not netting out repayment of borrowings). Over the whole period, they averaged to 4.8%.

Assuming tax revenues remained the same after withdrawing the food subsidies, then the deficit would have fallen by the amount of the food subsidy. This would have reduced the deficit in 1981-82 by 37.9% and in other years by a smaller proportion. But can we assume that the tax revenue would remain constant? *A priori*, there are a number of factors which would cause it to change. Although a general equilibrium model is needed to assess the net effect of these factors, intuition tells us that tax revenues would decline. First, there is the general deflationary effect of the deficit reduction. Second, if removing the subsidy reduces producer prices of the subsidised products, it would also reduce producer's incomes and taxes. Third, if consumer prices rose, consumers would shift expenditures away from other commodities (in so far as the subsidised products are basic and have a relatively inelastic demand) which would reduce sales tax revenues. Thus, it is likely that since removing food subsidies would lead to a fall in revenue, it would reduce the deficit less than the amount by which food subsidies were reduced.

Even if removing the food subsidies cut the deficit by somewhat less than 20%, in Zimbabwe's current economic situation this would still be significant. However, food subsidies are not the largest form of subsidy in Zimbabwe. To some extent, the question of food subsidies is coloured by the overall level of subsidies in the budget. The general and obvious point is that reducing the former should be viewed in the context of a programme to reduce the latter. It government is to reduce its deficit by reducing subsidies, there are other subsidies which should probably be higher priority candidates for cuts.

At a less aggregated level, there are the whole set of arguments very much related to the liberalization debate which concentrates on the "distortions" created by subsidies; particularly the effect they have on the production and consumption of tradables.

We saw above that the redistribution resulting from removing the food subsidies would result in higher consumption and reduced savings. Thus, it would affect the resource balance, accumulation, and future economic growth. But this is surely the consequence of any redistributive programme; one might even say, the intended consequence. To present this as a criticism of subsidies is, in essence, to question the desirability of a significant change in Zimbabwe's inherited income distribution.

A related point is most clearly articulated by Jansen, who argued that consumer subsidies were "leading to artificially high demands for the subsidized products" (Jansen, 1982, p. 27). I think this is correct, but have some difficulty in seeing it as a criticism of subsidies. The point of the subsidies is fundamentally a redistributive one. They are intended to raise the real income of the poor. Therefore, we would expect increased consumption of the subsidised products. In countries where most food is imported, there may be balance of payments consequences of subsidising food imports, but this does not apply to Zimbabwe.

The mistargeting critique

One of the main thrusts of the critics of subsidies in Zimbabwe is that they are inequitable. This centres around the evidence that, in some cases, more of the subsidies go to high income families. In other words, the subsidies are badly targeted. This argument is reflected in official statements on the issue.

Even accepting the evidence at face value, this argument is badly constructed. Badly targeted subsidies are not necessarily inequitable. They reduce the progressivity of the fiscal system, making the redistribution of income less than it would appear from an examination of the tax system alone. But this is not the same as increasing inequality since the distribution of income is likely to be better with the tax/expenditure system than without it.

In any event, considering the relative impact of the subsidies on the real incomes of the rich and the poor, even a badly targeted subsidy will raise the real income of the poor more than it raises that of the rich.

What can be argued, and generally is by the critics, is that a badly targeted subsidy is inefficient. This underlies the critique of blanket subsidies and the call for a more selectively targeted system. However, as economists we should not accept at face value the view that a selectively targeted system is more efficient than a blanket one. We should look at he costs of administering the two alternatives. In a sense, that portion of the blanket subsidies which does not hit the target can be regarded as part of the cost. Given that even selectively targeted subsidies will have some leakage, that their administrative costs are likely to be considerably higher than a blanket system such as Zimbabwe's, and that there is probably much more scope for abuse; should we accept a *prima facie* case in favour of selectively targeted subsidies?

To this general argument we should add some technical issues. To my knowledge, none of the critics of blanket subsidies have presented details on what specific selectively targeted subsidies they feel could work in Zimbabwe. We should carefully consider the assumption of separable markets which underlies the case for selective targeting. While there are examples of selectively targeted subsidies in other countries, the successful ones are generally aimed at important, but relatively narrow groups--such as households with malnourished children under five or with lactating mothers rather than with the poor in general. This evidence does not contradict the argument that blanket subsidies might be the most efficient way of reaching a wide stratum of the poor.

In Zimbabwe, the Child Supplementary Feeding Schemes are a selectively targeted subsidy. Since some reports suggest childrens' meals at home have been reduced once they received meals at school, the schemes may not improve their overall diet. This example shows the importance of taking into account fungibility and substitution when targeting subsidies. In practice, the selected target may not be the one that is hit.

The position taken by the Riddell Commission, but not picked up by other critics of subsidies, was that government should remove subsidies in conjunction with policies designed to increase the incomes of the poor. In particular, they recommend providing immediate access to better land for the rural poor and a phased introduction of poverty datum line based minimum wages for the working poor. In fact, it appears they saw these measures as required prior to any reduction of subsidies.

Mistargeting and inequity issues are most commonly raised in Zimbabwe with respect to urban and rural populations. It is commonly accepted that the bulk of the poor live in the rural areas, while the bulk of the subsidies go to urban consumers. Again, this conventional wisdom needs to be carefully examined. The analysis of microeconomic household survey data being collected by a growing number of researchers can make an important contribution to testing this supposition. In the absence of clear rural household models, let me continue to make some speculative observations.

First, consider the question of remittances. We know that remittances are received by over 30% of communal households; that for these households remittances constitute an important source of income; and that there is evidence that child nutrition is higher in rural households receiving remittances than in those that are not. How do subsidies affect remittances? Unless remittances are seen by the remitting households as inferior goods, we would expect them to be positively related to subsidies. Conversely, removing subsidies will reduce the real income of urban members of households and, *ceteris paribus*, reduce remittances. Second, remittances are often in-kind rather than cash. There is evidence that during the drought, subsidised maize meal flowed to the rural areas. Thus, the final consumer (the recipient of the subsidy) may not be the initial purchaser. The fall in real income for urban dwellers, consequent upon subsidy removal, will reduce flows of other goods--particularly productive inputs and small capital items. It is clear the remittances are one channel through which the removal of subsidies can have a negative impact on production, consumption, and accumulation in communal lands. Thus, any household modeling undertaken has to reflect a clear understanding of the nature and role of remittances.

Second, consider the more direct impact of subsidy removal on communal households. The critics of subsidies have argued that subsidies are likely to have a negative impact on these households. Let us further analyse this argument. In the first place, we have to differentiate between households, as some of the critics do. The fundamental dichotomy is between those households which are net consumers of subsidised food and those which are net producers. As argued elsewhere (Davies and Sanders, 1987), the rise in prices following attempts to reduce subsidies reduced real incomes of net consumers and raised those of net producers. Furthermore, we argued that there are signs that the proportion of net consuming households is growing,

A more thorough analysis would make finer distinctions than this simple dichotomy. Among producers, it would be useful to distinguish between those that produce the controlled good and receive the controlled price (i.e., most commercial farmers); those that produce the controlled good, but do not receive the controlled price (i.e., peasants who do not sell to the marketing boards); and those that do not produce the controlled good.

For producers in the first category, the crucial issue is the extent to which the controlled price is above or below the price they would otherwise obtain. As argued previously, the answer is not immediately obvious and requires further work.

The conventional wisdom accepts that subsidies reduce the prices received by producers in the second category, since the effective price for them is that which the consumers pay. While this seems probable, it is not certain. For example we can adapt an argument from the analysis of buffer stocks, that suggests that those outside the system might receive higher prices. Crudely, assume that the consumers have \$100 to spend on buying 100 units at \$1 each. The controlled price of \$0.50 covers one-half the supply. Consumers have satisfied one-half of their demand for only \$25. They might be willing to pay a higher price to obtain the remainder. If they paid \$1.50 each, they would spend \$75 to get the remaining 50 units, and would have spent \$100 overall. Obviously, substitution and elasticities affect the numerical outcome, but the net effect could be the same. Those outside the controlled market receive a higher price than those inside it; and depending on the actual numbers, possibly even higher than the market price.

The argument underlying the conventional wisdom goes as follows. The market is for a homogeneous product. Therefore, as far as consumers are concerned, controlled output and uncontrolled output are perfect substitutes. According to basic demand theory, reducing the price of a substitute leads to a fall in the price of the product. Therefore, if the price controls reduce the price of the output from the marketing boards, they should reduce the price in the informal peasant market. However, the alternative argument is that controlling the price of marketing board output creates excess demand and therefore increases the demand for and the price of the uncontrolled output.

Subsidies should have an income effect on the demand for the output of producers in the third category. How this will work depends upon the change in relative real incomes that takes place and what commodity the particular producer sells. It is possible that informal sector producers who produce wage goods will find that demand for their product rises, while producers who produce luxury good will find that their demand falls.

CONCLUSION

This paper raises question about the conventional wisdom regarding subsidies in Zimbabwe, by showing that there are several questions that can still be asked, or need still to be answered. In essence, while there are valid criticism of blanket subsidies, it is wrong to make a blanket dismissal of them.

In the debates over market liberalization, my concern over the rejection of subsidies is a specific instance of a wider concern I have with liberalization policies. The case against subsidies fundamentally rests on a view that in a free market (or in the absence of a free market, free trade) the allocation of resources is optimal. This of course is the basis for all liberalization arguments. Numerous theoretical and practical objections have been raised against this view in the history of economic thought. Currently, we appear to be going through period in which free market views are dominant, but the pendulum will swing back.

The case for liberalization fundamentally assumes that it is possible to redistribute income in any way we wish, so that the income distribution arising from a specific system of production is irrelevant in judging that system. Thus, we can concentrate on efficiency, comparative advantage, border prices, etc. and ignore any distributional consequences. If we accept this premise, then we also have to accept that governments are expected to redistribute income and that a tax/subsidy system is a legitimate and standard way of doing so. In this case, the debate should now concentrate much more specifically and practically on improving the redistributive mechanisms in Zimbabwe.

However, if we believe, as I do, that production and distribution are not separable and that there are practical limits to feasible redistribution; then the primary distribution of income is an important aspect of any system of production. In this case, although subsidies and other redistributive mechanisms might have a short-run welfare impact, their impact on asset ownership and patterns of accumulation is of greater concern. Perhaps this is the line along which further work should be undertaken.

REFERENCES

Callear, Diana. 1981. Food subsidies in Zimbabwe. Paper presented at the Zimbabwe Economics Society Conference, Harare (Mimeo).

Davies, R.J. and D. Sanders. 1987. Stabilisation policies and the effect on child health in Zimbabwe. *Review of African Political Economy.* Vol. 38 (April).

Jansen, D. 1982. Agricultural prices and subsidies in Zimbabwe: benefits, costs and trade-offs. USAID, Harare (Mimeo).

Thomson, A. 1985. Agricultural price policy in Zimbabwe. NORAD, Harare (Mimeo).

World Bank. 1986. *Poverty and hunger.* World Bank, Washington, D.C.

Zimbabwe Government. 1981. *Report of the commission of inquiry into incomes, prices and conditions of service (Riddell Commission).* Government Printers, Harare.

________. 1982a. *Report of the commission of inquiry into agricultural industry (Chavunduka Commission).* Government Printers, Harare.

________. 1982b. *Transitional national development plan 1982-83.* Government Printers, Harare.

________. 1984. *Budget statement 1984.* Government Printers, Harare.

________. 1985. *Budget statement 1985.* Government Printers, Harare.

________. various dates a. *Estimates of Expenditures.* Government Printers, Harare.

________. various dates b. *Financial statements.* Government Printer, Harare.