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Farm business analysis

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ASPECTS OF FARM FINANCIAL STRUCTURE

BY

G. D. D. DAVIES

W. J. DUNFORD

AND

S. T. MORRIS

“LAFROWDA”
ST. GERMAN'S ROAD
EXETER
DEVON

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ASPECTS OF FARM FINANCIAL STRUCTURE

A STUDY BASED ON THE ANALYSIS OF
FINANCIAL RECORDS FOR 60 FARM
BUSINESSES IN SOUTH WEST ENGLAND,
1958/59 TO 1967/68

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INTRODUCTION

For much of the past two decades, a persistent major problem for the agricultural industry of this country, with its preponderance of family and "family-sized" farms, has been that of adequately financing an increasingly intensive and technologically complex pattern of production. This has presented itself against a background of continuing shifts to relatively more expensive factors of production and of generally rising factor costs which have resulted from the competing claims of other sectors of the economy for resources and from the overall inflationary economic trend. The efforts of the farming community to meet this problem by increasing the efficiency with which the various factors of production are combined have been reinforced by Government assistance both in the form of long-term commodity price support assurances and a system of direct production and investment grants. Nevertheless, the view has steadily gained ground that the profits remaining to many farm businesses, after the satisfaction of family consumption and minimal savings requirements—requirements which have themselves undoubtedly risen in the context of rising national living standards and general inflation—have been subjected to strain as the principal source of funds from which future farm operation and expansion should desirably be financed. The effect of this, it is frequently contended, has been to cause inroads to be made into the farmer's reserves which represent the accumulation of past saving and also to break down the traditional reluctances to the use of credit.

Despite the many opinions which have been voiced, however, there is still a relative dearth of documentary evidence relating to the movement of funds at the individual farm business level. One attempt to fill the gaps existing in this particular area was made by this Unit when, in an earlier report,¹ it examined in considerable detail, for a sample of farm businesses in the South West of England and for a period of ten years from 1949/50 to 1958/59, the nature and extent of disposals of available farming funds and the composition of the sources from which those funds were derived. But a period of nine years has elapsed since the findings of this study were published and it seems reasonable to assume that, over this period, such problems as were earlier shown to exist have been aggravated rather than diminished. The view has, therefore, been adopted that a useful purpose might be served by attempting to discern what changes, if any, occurred in the sources and disposal of farming funds within a similar sample of farms during the ten-year period succeeding the period spanned by the earlier study. Such a review might, for example, seek to ascertain the degree to which farm-generated funds have been subjected to strain as a source from which the competing demands of farm and family have been met; whether any changes in the use of credit are to be observed which might indicate an acceptance, either from necessity or from choice, of borrowing as a source of funds; the extent to which farmers' reserves have been depleted in order to supplement other sources of farming funds; and whether Exchequer-derived funds constituted a growing or a diminishing proportion of the total funds available.

¹ Rickard, R. C., Luxton, H. W. B., and Morris, S. T., "Financing the Farm Business," Report No. 137, Agricultural Economics Unit, Department of Economics, University of Exeter.

With these purposes in mind, therefore, a sample of 60 farm businesses in South West England, for which comprehensive financial records (including balance sheets) existed for the period 1958/59 to 1967/68, was assembled and these records analysed in considerable detail. What are thought to be some of the more important aspects of this analysis are presented in this report while it is hoped that other related aspects may form the basis of subsequent publications.

The relative smallness of the sample must be conceded at the outset, but any shortcomings which it is seen to possess in this direction must be set against the knowledge that the findings of the study are based on data which have been derived from fully audited and proven accounts, by the fact also that it has proved possible to obtain comparable data over a period of ten years for an identical sample of farm businesses, and by the detailed manner in which it was possible to conduct the enquiry. Finally, in assembling what must inevitably appear to be a formidable body of data, a genuine attempt has been made to achieve a manner of presentation which will permit its further analysis and utilisation by as wide a range of interested readership as possible.

I

THE SAMPLE

As in the earlier investigation, the determining factor in the selection of farms for inclusion in the study was the availability of adequately detailed and sufficiently continuous financial records and, in the event, 60 farms were identified which satisfied the necessary conditions. All of these farms were, at the time of the conclusion of the study period, established, long-standing co-operators with this Unit in the regional farm survey which it undertakes annually as part of the national Farm Management Survey and were, by virtue of their inclusion in that Survey, full-time, bona-fide farmers. While the sample is not a random one, therefore, there are strong grounds for the belief that all of the farms which it contains might well feature in any representative cross-section of the farming community in the South West of England.

Geographically the farms in the sample were fairly widely scattered, although the largest proportion of them (43) fell within the county of Devon which is the largest of the three counties falling within the purview of this Unit. A further 14 were located in Cornwall and three in Dorset. All of them possessed accounting periods which ended within the six months from the end of September to the conclusion of the fiscal year at the beginning of April but rather more than a half (36) accounted to dates falling at or near the end of March. The remaining farms were almost equally divided in their choice of accounting year-end between the end of September and the end of December.

The sample was necessarily confined to unincorporated farm businesses operating either on a sole trader or a partnership basis but this limitation was felt to be an acceptable one in view of the very distinct problems of financing which businesses of this type pose compared with businesses which operate within a limited liability structure. Moreover, such relatively small-scale unincorporated businesses still form the framework of operation for the majority of farms in this country and doubtless this will continue to be the case for a considerable time to come.

Such changes which did occur, over the period of the study, in the business structure of the component farms of the sample are set out in Table 1. It will be seen that, in 1958/59, 48 of the farms were operated on sole trader basis and 12 as partnerships consisting of either two or three principals; only one of the latter, however, was a partnership which involved a principal who was not a close family relative. By 1967/68 there were 18 family partnerships and two partnerships involving unrelated persons, although this position resulted from the creation of nine new partnerships and the reversion of one family partnership to a sole trader situation. With the possible exception of one non-family partnership the reasons for the formation, or the continuation, of the partnerships which were found to exist during the study period were other than that of capital accumulation; they included the prospect of taxation benefits and, to a lesser extent, the formal recognition of the shared family management responsibilities, and the accommodation of special or restrictive tenancy conditions.

Table 2 shows the distribution of the sample farmers according to their age at the conclusion of the study period and indicates that more than

a third of them fell in the age bracket of 51–55 years, while the second largest group (16) was comprised of farmers who were over 60 years of age. The average age of the 60 farmers in 1967/68 was approximately 55 compared with an average age, in 1958/59, of about 50 for the farmers included in the earlier study¹ but, in spite of this slightly higher average age, the number of sample farmers who, over the period of the more recent study, were actively assisted in the running of their farms by a son (or sons) remained proportionately the same at approximately one-third.

Twenty-two farmers—just over one-third of the sample—had made their entry into farming in a risk-bearing and managerial capacity in the immediate post-war period from 1946 to 1950 (see Table 3) while the 34 farmers with an earlier date of entry were equally divided into pre-war entrants and war-time entrants. Only in the case of four farms had the farmer concerned assumed a management role after 1950 and of these only one could, with any justification, lay claim to being a recent entrant. Even in this instance, however, the farmer had assumed, with another member of the family as a partner, the management of the small family farm on which both partners had worked for many years with their elderly father.

To all intents and purposes, therefore, the sample was comprised of established farmers for whom the normal goals of commercial farming can be fairly said to have operated throughout the study period despite the fact that their average age was rather higher than that revealed by the sample used in the earlier investigation.

A comparison of the sample classifications by size of farm, undertaken for the first and last accounting years of the study period (see Table 4), indicates that there was a discernible movement of farms from the 50–200 acre range into the 200 acres and over bracket. This is reflected in an increase in the average size of the sample farms from 128 acres in 1958/59 to 150 acres in 1967/68.

These figures reveal that, on average, the 60 farms which form the basis of the present study tended to be rather smaller than the parent sample of Farm Management Survey farms from which they were drawn. An identical sample of 160 of these latter farms was found to have increased its average size from 166 acres to 200 acres over the same ten-year period. However, the magnitude of the increase in average size is seen to be of a similar order for both the parent sample and the derivative subsample: 20 per cent and 17 per cent respectively. In total the acreage of the farms included in the study sample increased from 7,712 acres to 9,089 acres, while individual farm size ranged from 37 to 305 acres in 1958/59 and from 29½ to 390 acres in 1967/68.

The cropping and stocking data for the 60 sample farms which are set out in Tables 5 and 6, together with comparative data for Farm Management Survey samples in the South West, reveal a pattern of farming which was broadly similar to that of the parent sample at the outset of the study period and which also followed the general trends of the larger sample over the ten-year period. Thus, both samples reflect the overall regional picture of a predominantly livestock farming economy based on grass which experienced a measure of intensification in the numbers of grazing

¹ For age classification of farmers included in the earlier study see Appendix A, Table i.

livestock while exhibiting a decline in the overall numbers of pigs.¹ Only in their trend in overall poultry numbers did the two F.M.S. samples differ from the regional livestock pattern showing a decline in contrast to the increase revealed by regional Census data. This deviation, however, is probably explained—in part at least—by the fact that the regional material, unlike the F.M.S. sample, included returns from specialist poultry producers whose expansion in the ten-year period was a factor in the decline in the smaller-scaled poultry enterprise on many mixed livestock farms.

The expanding importance of cereal growing at the expense of the acreages of root and other fodder crops and grass, evident in the South West regional figures over the period, is also reflected in the F.M.S. sample data, as is the marked swing away from oats and mixed corn in favour of barley and wheat which are concealed by the more modest increase obtained when the overall trend in cereal acreage is measured.

The effect of these changes on the broad classification of the F.M.S. farms by type of farming is indicated in Table 7. No change occurred in the representation of the Cattle and Sheep farms whose physical environment one would, in any case, expect to be more limiting, but there was a pronounced shift of farms (10) from the Mixed Livestock group to the Mainly Dairy group.

The farm businesses included in the present financial study followed the national trend in the pattern of land tenure when classified according to their respective ratios of tenanted to owner-occupied land. Farms with rented acreages amounting to 50 per cent or more of their total farm acreage were classified, in each of the ten years of the study period, as either wholly or mainly tenants, while those with acreages held in owner-occupation which accounted for more than 50 per cent of total farm acreage were classified as either wholly or mainly owner-occupiers.

On the basis of this manner of classification, a marked difference in the pattern of tenure obtaining in 1967/68 compared with the situation in 1958/59 was found to exist. Thus, at the commencement of the study period, more than half of the farms in the sample (35) were either exclusively or predominantly tenants whereas, by the end of the period, the number of such farms had fallen to 22 and farms which were either wholly or mainly owner-occupied predominated (see Table 8).

The extent of change in the tenure pattern of individual farms over the ten-year study period has been used as the basis for the main classification of the sample for the purposes of data analysis and presentation and three distinct groups of farms identified. These comprise: (a) farms which remained classifiable as wholly or mainly owner-occupiers throughout the study period; (b) farms which, in the same period, remained classifiable as wholly or mainly tenants; and (c) farms where the proportion of owner-occupied land to tenanted changed to such an extent that they required re-classification. In the event, farms in the latter category were found conveniently to consist only of farms which changed their status from being entirely or mainly that of a tenant to being entirely or mainly that of an owner-occupier. The number of farms falling into each of these three groups is set out in Table 9.

Each of the three groups thus identified shared in the general increase

¹ See regional Census data included in Appendix A, Table ii.

in acreage of the overall sample, although the farms which remained either wholly or mainly tenanted in composition witnessed the largest increase amounting to 27 per cent. However, the last two columns of Table 9 show that, while the farms which were consistently wholly or mainly tenanted in character increased only to a modest extent their proportion of owned land when expanding their total acreage, the farms which changed their status did so not only by virtue of the acquisition of additional owner-occupied land but by their becoming the owners of the farms which they had hitherto rented. This they did either by the purchase of those farms—in a number of cases on the break-up of prominent estates—or by family gift or inheritance. Moreover, the fact that the increase in area experienced by the Wholly and Mainly Owner-occupiers was accompanied by a slight decline in the proportional importance of owner-occupied land did not constitute a reversal of the general trend towards land ownership as the extent of the acquisition of additional rented land by this group was distorted by the circumstances of one particular case.

The 60 farms in the study sample reveal, in Table 10, an average net farm income per farm of £1,373 for the initial year of the study, although the comparable figures for the three individual tenancy groups ranged from £1,194 for the tenants to £1,578 for those who transferred to owner-occupier status. In each of these sub-groups costs per farm rose at a faster rate than output during the ensuing nine years but, despite this, average net incomes also rose: by 41 per cent in the case of the tenants but by as little as 14 per cent for the owner-occupiers and by as much as 64 per cent for the transfers. For the sample as a whole the increase in the average net farm income amounted to 35 per cent.

In the final year of the study, therefore, average net farm income per farm was lowest in the case of the owner-occupiers (£1,621) and again highest for the transfers, with an average net farm income of £2,592. On average, however, the 60 farms earned a net farm income per farm of £1,856.

These changes in income levels per farm for the various tenancy groups within the parent sample are, of course, associated with the varying changes in farm acreage described above with the result that, measured on a per acre basis, a rather different picture emerges. All three groups witnessed, to a greater or lesser degree, an increase in their acreage with the result that the rate of increase in output and costs was of a lower order when measured on a "per acre" rather than a "per farm" basis; but such was the relative movement of output and costs within the group of owner-occupied farms, which experienced the least expansion in acreage, that net farm income per acre actually fell slightly during the period: from £12.4 to £12.3 per acre. The rate of increase in net farm income per acre for the tenants, however, was nine per cent while, for the transfers, it amounted to 36 per cent, although it should be borne in mind that the latter group consisted of a relatively small number of farms which included a few highly successful ones.

TABLE 1

CLASSIFICATION OF SAMPLE FARMS BY TRADING BASIS
 All Farms (60)
 1958/59 and 1967/68

<i>Trading Basis</i>	1958/59		1967/68	
	<i>No.</i>	<i>Per cent</i>	<i>No.</i>	<i>Per cent</i>
Sole traders ...	48	80	40	67
Partnerships: family	11	18	18	30
other	1	2	2	3
Total	60	100	60	100

TABLE 2

CLASSIFICATION OF SAMPLE FARMERS BY AGE
 All Farmers (60)
 1967/68

<i>Age Group</i>	<i>No.</i>	<i>Per cent</i>
40 years and under	1	2
41-45 years of age	8	13
46-50 " " "	7	12
51-55 " " "	23	38
56-60 " " "	5	8
Over 60 " " "	16	27
Total	60	100

TABLE 3

CLASSIFICATION OF FARMERS BY DATE OF ENTRY INTO FARMING IN A MANAGEMENT AND RISK-BEARING CAPACITY
 All Farmers (60)

<i>Date of Entry</i>	<i>No.</i>	<i>Per cent</i>
Pre-1939 ...	17	28
1939-1945 ...	17	28
1946-1950 ...	22	37
1951-1955 ...	3	5
1956-1958 ...	1	2
Total	60	100

TABLE 4

CLASSIFICATION OF SAMPLE FARMS BY SIZE OF FARMS¹
 All Farms (60)
 1958/59 and 1967/68

<i>Size Group</i>	1958/59		1967/68	
	<i>No.</i>	<i>Per cent</i>	<i>No.</i>	<i>Per cent</i>
20 and under 50 acres	5	8	5	8
50 " " 100 "	16	27	11	18
100 " " 150 "	17	28	16	27
150 " " 200 "	14	23	13	22
200 " " 300 "	7	12	12	20
300 acres and over	1	2	3	5
Total	60	100	60	100

¹ Total farm acres including buildings, roads and unadjusted rough grazings.

TABLE 5

**ANALYSIS OF CROPPING FOR 60 SAMPLE FARMS AND
THE PARENT SAMPLES OF F.M.S. FARMS**

Acres Per 100 Adjusted Acres

1958/59 and 1967/68

<i>Crop</i>	<i>Sample Farms</i>			<i>F.M.S. Farms</i>		
	1958/59	1967/68	<i>Percentage change 1958/59 to 1967/68</i>	1958/59	1967/68	<i>Percentage change 1958/59 to 1967/68</i>
Wheat	0.9	1.5	+ 66	3.1	4.9	+ 58
Barley	8.8	16.5	+ 88	9.5	17.7	+ 86
Oats... ..	3.9	2.3	- 41	3.3	1.8	- 46
Mixed corn	3.6	0.4	- 89	2.8	0.5	- 82
Potatoes	1.1	0.9	- 18	0.9	1.1	+ 22
Turnips and swedes	0.8	0.7	- 13	0.9	0.8	- 11
Mangolds	0.6	0.2	- 67	0.5	0.1	- 80
Rape/kale/cabbage	3.8	3.1	- 18	3.9	2.7	- 31
Other crops	0.5	0.1	- 80	0.8	0.5	- 38
Total Tillage ...	24.0	25.7	+ 7	25.7	30.1	+ 17
Grass conserved ...	26.0	26.5	+ 2	27.4	27.0	- 2
Grass grazed ...	47.6	46.4	- 3	44.4	40.9	- 8
Rough grazing (pasture equivalent)	2.4	1.4	- 42	2.5	2.0	- 20
Total Grass ...	76.0	74.3	- 2	74.3	69.9	- 6
Total Adjusted Acres	100.0	100.0	-	100.0	100.0	-
Number of Farms	60	60	-	259	201	-

TABLE 6

**ANALYSIS OF STOCKING FOR 60 SAMPLE FARMS AND
THE PARENT SAMPLES OF F.M.S. FARMS**
Numbers of Livestock (Closing Valuation) Per 100 Adjusted Acres
1958/59 and 1967/68

Class of Stock	Sample Farms			F.M.S. Farms		
	1958/59	1967/68	Percentage change 1958/59 to 1967/68	1958/59	1967/68	Percentage change 1958/59 to 1967/68
Horses	0.4	0.2	— 50	0.3	0.2	— 33
Cows	16.3	19.5	+ 20	17.3	24.1	+ 89
In-calf heifers	3.4	3.5	+ 3	3.4	4.1	+ 21
Other cattle	24.5	27.4	+ 12	22.6	24.3	+ 8
Total	44.2	50.4	+ 14	43.3	52.5	+ 21
Ewes	43.6	51.5	+ 18	36.0	42.4	+ 18
Other sheep	48.9	51.5	+ 5	42.6	47.4	+ 11
Total	92.5	103.0	+ 11	78.6	89.8	+ 14
Sows and gilts	3.9	2.3	— 41	3.0	2.5	— 17
Other pigs	48.5	28.6	— 41	27.7	20.9	— 25
Total	52.4	30.9	— 41	30.7	23.4	— 24
Poultry	319.3	71.0	— 78	217.3	66.1	— 70
Number of Farms	60	60	—	259	201	—

TABLE 7

CLASSIFICATION OF SAMPLE FARMS BY TYPE OF FARMING

All Farms (60)

1958/59 and 1967/68

<i>Type of Farming</i>	1958/59		1967/68	
	<i>No.</i>	<i>Per cent</i>	<i>No.</i>	<i>Per cent</i>
Mainly Dairy	22	37	32	54
Mixed Livestock	27	45	17	28
Cattle and Sheep	11	18	11	18
Total	60	100	60	100

TABLE 8

CLASSIFICATION OF SAMPLE FARMERS BY TENURE STATUS

All Farmers (60)

1958/59 and 1967/68

<i>Tenure Status</i>	1958/59		1967/68	
	<i>No.</i>	<i>Per cent</i>	<i>No.</i>	<i>Per cent</i>
Wholly Tenant	30	50	15	25
Mainly Tenant... ..	5	8	7	12
Mainly Owner-occupier	7	12	11	18
Wholly Owner-occupier	18	30	27	45
Total	60	100	60	100

TABLE 9

**ANALYSIS BY TENANCY GROUP OF CHANGES IN THE
OCCUPANCY OF LAND HELD BY THE SAMPLE FARMERS**

All Farms (60)

1958/59 to 1967/68

Tenancy Group	No.	Per Cent	Total Farm Acreage		Percentage change in total acreage 1958/59 to 1967/68	Owner-occupied Land as a Percentage of Total Farm Acreage	
			1958/59	1967/68		1958/59	1967/68
Farms remaining wholly or mainly in owner-occupation	25	42	3,201½	3,578½	12	98	94
Farms remaining wholly or mainly in tenant-occupation	22	37	2,803½	3,565½	27	3	13
Farms wholly or mainly in tenant occupation becoming wholly or mainly owner-occupied ("transfers")	13	21	1,707	1,945½	14	6	91
Total ...	60	100	7,711½	9,089½	18	43	62

TABLE 10

CHANGES IN GROSS OUTPUT, COSTS AND NET FARM INCOME

All Groups
1958/59 to 1967/68

Tenancy Group	1958/59		1967/68		Percentage Change 1958/59 to 1967/68	
	Per farm	Per adj. acre	Per farm	Per adj. acre	Per farm	Per adj. acre
ALL FARMS (60 farms)	£	£	£	£	%	%
Gross output ...	5,720	48.8	8,141	57.2	+ 42	+ 17
Costs ...	4,347	37.1	6,285	44.2	+ 45	+ 19
Net farm income	1,373	11.7	1,856	13.0	+ 35	+ 11
OWNER-OCCUPIERS (25 farms)						
Gross output ...	5,547	48.3	7,009	53.2	+ 26	+ 10
Costs ...	4,124	35.9	5,388	40.9	+ 31	+ 14
Net farm income	1,423	12.4	1,621	12.3	+ 14	— 1
TENANTS (22 farms)						
Gross output ...	5,345	44.3	7,740	49.7	+ 45	+ 12
Costs ...	4,151	34.4	6,053	38.9	+ 46	+ 13
Net farm income	1,194	9.9	1,687	10.8	+ 41	+ 9
TRANSFERS (13 farms)						
Gross output ...	6,687	57.5	10,996	78.6	+ 64	+ 37
Costs ...	5,109	43.9	8,404	60.1	+ 65	+ 37
Net farm income	1,578	13.6	2,592	18.5	+ 64	+ 36

II PROCEDURES OF ANALYSIS

In view of the predominantly "balance sheet" approach of this study it is felt that some reference to the construction and interpretation of the farm balance sheet ought, perhaps, to be included here for the benefit of those who are unfamiliar with the document. Such reference, however, will necessarily be brief and those wishing to read further on the subject are referred to a more detailed explanation undertaken in a previous publication by this Unit.¹

The two main acknowledged functions of the balance sheet as an accounting document are:

- (i) to provide both a periodic listing of the total realisable assets owned by a business and a related listing of the various sources of the funds with which those assets were initially acquired, such a listing indicating the nature and extent of the claims which may be made against the assets of the business at the date of the balance sheet.
- (ii) to provide a concise record of the nature of the source and the relative importance of additional funds acquired by the business within the span of a single accounting period.

The assets of a business which are scheduled in a balance sheet comprise all those items owned by a business which have a realisable money value. Conventionally—although not invariably—they occupy the right-hand side of the balance sheet and are ranked according to their liquidity: that is, according to their ease of convertibility into cash. This property of convertibility—and more important, convertibility without prejudice to the maintenance of production potential—is an important feature of the asset structure of a business as it determines the latter's ability to withstand the claims of creditors as and when these fall to be met. In terms of the overall life of a farm business the period of commitment of funds is obviously longest in the case of assets such as land and buildings and the improvements vested in them. That period will be shorter but still appreciable for assets such as machinery and breeding livestock which are assets which do not enter directly into the production process even though, over a succession of production periods, some of them may be partially or wholly used up. By their nature, therefore, the value of such assets cannot be realised at any point in the life of the business without serious impairment of its capacity to produce and they are, in consequence, usually referred to as fixed assets.

More readily realisable are those physical assets held by the business which, at a given point in time, will appear as "raw materials" awaiting transformation into crop and livestock products (seeds, feeding-stuffs, and other stores), as partly finished products or finished products awaiting marketing, and as direct cost items such as fuel and fertilisers which are normally entirely expended or consumed within the course of a single production period. These assets together form the physical component of

¹ Davies, G. D. D., and Dunford, W. J., "The Farm Balance Sheet: Its Construction and Interpretation", Report No. 167, Agricultural Economics Unit, Department of Economics, University of Exeter.

that category of assets usually termed "current assets" the balance of which will consist of the financial assets of the business. These will normally be held in the form of fully liquid funds on current account at the bank or in hand and as "near-liquid" debtor balances and very short-term loans to persons or bodies associated with the farm business.

The liabilities on the balance sheet represent a schedule of those individuals and bodies with claims upon the funds invested in the business either in the shorter or the longer term. Among those claims will feature that which the owner of the business can be regarded as having against any realised value of the business when he is viewed as another lender of funds to the business. This claim, known by a variety of names (equity, net worth, owner's capital), represents the residual claim which the owner has against the business after all assets have been liquidated and all outside claims against them have been met.

Deferred claims in the form of fixed interest loans repayable at or over some specified time in the future beyond the span of the normal production cycle are usually listed next to the owner's equity with the third main category of liabilities—those conventionally described as "current"—completing the list. Current liabilities will normally comprise the sundry creditors of the business whose claims can be expected to be presented in the relatively near future, bank overdraft facilities (which must advisedly be regarded as short-term whatever appearance they may assume in retrospect) and other short-term loans to the business.

In a sense the balance sheet records only one phenomenon—the funds employed by a business. Regarded in this light, its dual nature can be seen to derive from its ability to view these funds from two distinct stand-points: one concerned with the source from which those funds have been acquired and the other with the area of investment within the business to which they have been directed. For this reason the two sides of the balance sheet must always be equal and none of the changes which may occur in the composition of the balance sheet as a result of the production process nor any changes in the supply of funds to the business can disturb this equality. Changes in a balance sheet over time must in fact be confined to one or other of two main kinds. First, they may be changes which merely result from the transformation of one type of asset into another or one type of liability into another. Thus products in store can be sold on credit, appear in successive periods as debtors and then as cash with the aid of which the whole production process can begin again; sundry trade creditors can be paid by increasing an existing overdraft; or an obligation to repay a family loan can be waived by deed of gift or inheritance transforming the liability from long-term debt capital into owner's capital. Such changes alter the composition of the balance sheet but not the total of its assets and its liabilities.

On the other hand, changes can occur which affect the overall volume of funds invested in the business. Additional funds can be borrowed or introduced by the owner and these will be used either to acquire additional physical assets or to swell, at least temporarily, liquid funds; cash funds surplus to working and contingency requirements may be withdrawn and invested elsewhere, reducing the owner's investment in the farm business; or, periodically, the values of listed physical assets may be amended either in an upward or a downward direction in the light of changed circum-

stances and this will be reflected in the residual value of the assets accruing to the owner in the event of liquidation. All of such changes will alter not only the composition of the assets or the liabilities but also, by the same amount in each case, their totals.

If, as a result of inability or failure to maintain assets, these should appear to be incapable, on realisation, of meeting the claims of those lending funds to the business then, of course, the business is said to be insolvent and the balance sheet characteristic of equilibrium will be maintained by the appearance on the asset side of a capital deficit: that is, assets will include, as a claim which the business may legitimately make upon the owner in his rôle as guarantor, the amount of the shortfall in the business's ability to meet the claims of its creditors.

It is hoped that these few comments will serve to emphasise not only the descriptive aspects of the balance sheet but also the importance of the more fundamental relationships which are embodied in it, particularly in so far as these will reflect the vulnerability of the business in face of the claims likely to be made upon it by outsiders.

It follows, therefore, that the striking of a balance sheet at regular intervals is not only a critical test of accounting accuracy but also an instructive exercise in its own right. Such periodic stock-takings are somewhat analogous to a series of cinematic film "stills" or frames which freezes the action at a number of selected points in time within a sequence of continuing movement and change. Clearly it will materially assist in one's understanding of events if the movement which links one "still" to the next can be conveniently depicted. In the case of the balance sheet this is feasible by undertaking a "sources and disposal of funds" exercise which identifies from two consecutive balance sheets the exact nature of the disbursements made, both within the asset structure of the business and to areas outside it, from those additional funds available to the business in the intervening period as a result of additional borrowings, the introduction of additional personal funds by the owner or the availability of earnings generated by the trading activities of the business.

While the brief examination of the balance sheet contained in this section has been conducted in terms of a single farm business, it remains equally valid for an aggregated balance sheet for any number of farms and the procedures adopted in subsequent sections of this report for data analysis and presentation derive directly from a recognition of this fact. Thus it will be seen that the first of the two main functions of the balance sheet listed at the beginning of this section is employed in collating material for Sections III and IV while the second of them is used as the basis for the presentation of material in Sections V and VI.

The data on which the main body of this report is based were derived either from the contents of existing farm balance sheets or from specially constructed ones where the information enabling this to be done was already available or could be acquired without too much difficulty. In assembling the data for analysis a number of adjustments were made to component items of existing balance sheets in order that a measure of comparability might be achieved not only within the sample but also, it is hoped, with data which may subsequently become available as a result of the growing interest of other bodies in the field of farm financial structure

and management.¹ The nature of these adjustments will be described in greater detail either at appropriate points in the text or in Appendix B but, in brief, they will be seen to arise from the decision to employ the measure of net farm income rather than trading profit as the base for the determination of the farm generated contribution to total farm funds (thus maintaining a valuable link with the Farm Management Survey of incomes in agriculture the results of which are published annually by the Ministry) and the revaluation of certain assets in the interests both of consistency and of realism. Where balance sheets were specifically constructed for this study then assets were valued, from the outset, in accordance with the study's requirements.

¹ In this respect, particular mention must be made of the Survey of Liabilities and Assets carried out by the Ministry of Agriculture, Fisheries and Food on a sub-sample of its National Farm Management Survey sample for 1969-70. Preliminary results of this survey, which has been undertaken with the assistance of contracted University Departments and Units of Agricultural Economics, have been incorporated in the Ministry report "Farm Incomes in England and Wales 1969-70", published by H.M.S.O. while more detailed results have appeared in a subsequent report, "Farm Management Survey: Farm Liabilities and Assets in England and Wales 1969-70", prepared by (and available from) Economics Division I of the Ministry of Agriculture, Fisheries and Food, Whitehall Place (West Block), London S.W.1. It is the intention of the Ministry of Agriculture, Fisheries and Food to repeat the Survey of Liabilities and Assets for 1970-71.

III

THE STRUCTURE OF ASSETS

1957/58, 1962/63 AND 1967/68

In any assessment of business asset structure, including the changes which may have occurred in that structure over time, the conclusions which are eventually reached will be dependent to a very large extent upon the values which must necessarily be imputed to the physical components of the asset inventory. For this reason the reader is referred, at the outset of this section, to Appendix B where the bases used for determining the values of assets included in the present study are described.

Subject, then, to the contents of Appendix B, Tables (11a) to 11(d) portray the main features of the asset structure of the sample farms as a whole and of the three sub-samples which have been distinguished on the basis of their tenure characteristics. In every case the total recorded value of assets increased markedly but most notably for the tenants who became owner-occupiers during the period of the study; in their case, the total value of assets rose more than four and a half times over the ten-year period. The increases experienced by the two sub-groups consisting of farm businesses whose basis of tenure had remained generally unchanged were of a smaller order but, nevertheless, they were still substantial with the value of total assets more than doubling in both cases.

For all groups the trend towards the owner-occupation of previously rented land, the acquisition of additional land—either by purchase or by transfer of title—and the increasing value of agricultural land resulted in an increase in the depicted value of assets held in the form of land, buildings, and improvements, the magnitude of which overshadowed all other changes in the asset structure of the sample farms. For example, for the entire sample of 60 farms, the proportion of total assets invested in land and buildings can be seen to have increased, if the valuation bases which have been employed are accepted, from 36 per cent at the beginning of the ten-year period to 62 per cent at its conclusion. However, this overall change in asset structure conceals a number of marked differences in the comparable figures for the individual sub-groups. Thus, on the farms which retained their classification as wholly or mainly owner-occupiers throughout the study period, land and buildings as a proportion of total assets increased in importance from 56 to 73 per cent. For farms which remained predominantly in tenant occupation this proportion rose from 8 to 27 per cent while the greatest increase, predictably, was reserved for the tenants who subsequently became owner-occupiers: in the latter case land and buildings as a proportion of total assets rose from eight per cent to 69 per cent.

These differences in the changes in the value of land and buildings as a proportion of total assets are clearly related to the particular tenancy characteristics of the various groups and, as such, were presaged by the contents of Table 9 in the previous chapter. However, they are explained in rather more detail by the contents of Table 11(a) and its counterparts and by the summary provided by Table 12. The breakdown of the relevant increases in the value of land and buildings into their constituent parts which is provided by these tables shows that, for the owner-occupiers, the greater part of the increase (73 per cent) is attributable to the increase

which accrued to the net worth of the sample farms as a result of the two revaluations which were undertaken. In the case of the continuing tenants, however, the increase arising on property revaluation accounted for only 17 per cent of the overall increase in the value of land and buildings, the greater part of which reflects the growing acquisition of title to land. This latter trend was sufficient in the case of the tenants-turned-owners to occasion their re-classification but, by the same token, it rendered these farms more susceptible to the effects of revaluation particularly as a significant number of farmers in this group purchased their farms in the early years of the study period, their properties then being involved in both revaluation exercises. As a result, over the ten-year span, the increase in the balance sheet value of assets held in the form of land and buildings for this group of businesses was due, in roughly equal proportions, to revaluation and to the increased incidence of ownership.

The corollary to these over-riding changes in the value of the land and buildings element of fixed assets is the downward trend in the relative importance of nearly every other component of the asset structure of the four farm groupings (the only exceptions being a small rise in the incidence of landlord-type improvements within the group of continuing tenants and, for this same group, an unchanged proportional position for debtor balances). However, this movement in the relative importance of the traditional tenant-type assets (machinery, live and deadstock and working capital) conceals the absolute increase, evident from the final columns of Tables 11(a) to 11(d), which generally occurred in the volume of these assets, measured in money terms, from 1957/58 to 1967/68 with the single exception of cash balances.

The value of depreciated farm machinery and equipment increased by 49 per cent for the sample of 60 farms, a figure which was closely matched by that of 51 per cent for the tenants who later became owners. The two other sub-groups, however, showed some divergence on either side of these figures and the increase in the case of owner-occupiers amounted to only 38 per cent compared with 60 per cent for the tenants.

In the case of the value of breeding livestock, the owner-occupiers again witnessed the smallest increase of the three tenancy groups—61 per cent compared with 71 per cent for the tenants and 73 per cent for those who changed their status.

Within the general category of current assets both physical working assets (non-breeding livestock, crops in production or stored for sale, and production materials) and debtor balances increased generally but most markedly in the case of the tenants where they rose by 86 and 131 per cent respectively; for the owner-occupiers more modest increases of 41 per cent and 62 per cent were recorded. The corresponding figures for the sample as a whole naturally occupy an intermediate position in relation to those just quoted for the two more stable tenancy groups as do the figures for the transitional group.

Contrary to the general trend in the volume of assets, however, Table 11(a) shows that average cash balances in the sample as a whole witnessed a decline of six per cent over the ten-year period although a comparison with the mid-period position does suggest some measure of recovery in this class of assets. This trend, which is repeated in the case of the owner-occupier sub-sample, becomes one of more continuous decline in the case

of the tenants (where cash balances fell overall by 51 per cent), but is reversed for the transfer group (where an increase in cash balances of 73 per cent occurred) due to an inordinate inflow of liquid funds from outside the business in the final year of the study period which took place on a small but relatively significant number of businesses in this, the smallest of the sub-groups.

The overall trend in the stock valuation component of current assets for the period 1958/59 to 1967/68 which is indicated by Tables 11(a) to 11(d) is amplified by the contents of Table 13 which shows the constituent movements of which this overall trend is composed, together with a re-statement of the trend in the value of breeding livestock for the purposes of comparison. This latter table demonstrates that all the main items embodied in the total stock valuation shared, with some variations in emphasis, in the general valuation increase which was recorded. Also incorporated in Table 13, as a series of footnote references to the main body of the table, are those elements of the appropriate valuation increases which are attributable to occasional livestock revaluations.

This brief review of tenant-type assets has so far been undertaken within the context of the changes in the total asset structure which were dominantly influenced by the growing importance of fixed assets in the form of land and buildings. Thus tenant's assets other than cash balances can be seen to have increased in money terms although they have decreased in relative importance within the total asset structure. Such analysis, however, tends to obscure an interesting facet of the data: namely, the remarkable consistency, within individual groups, of the composition of tenant's assets despite some differences between groups. This consistency is particularly evident if tenant's assets are further classified, as in Tables 14(a) to 14(d), into those of a fixed nature and those which are considered to be current. For the sample as a whole, fixed tenant's assets as a proportion of total tenant's assets amounted to 57 per cent for the initial year of the study, 59 per cent for the mid-point year of 1962/63 and 58 per cent for the final year. The three sub-groups yield comparative figures which bracket those for the full sample but which, again, display a marked stability: for the owner-occupiers the corresponding figures are 55, 58, and 58 per cent; for the tenants, 62, 64, and 62 per cent; and—in the case of the farms which changed their tenure status—51, 52, and 49 per cent.

This stability in the proportion of total tenant's assets represented by fixed tenant's assets is matched by a corresponding degree of stability in the relative importance of current assets as a whole and by a comparable stability in the relative importance of the dominant component of current assets: that is, physical working assets represented by the live and dead-stock valuation. However, financial working assets—comprising mainly debtors and cash balances which altogether constituted, over the range of identified farm groups and for the three years indicated, some 10 to 18 per cent of total tenant's assets—underwent some compositional change as the less liquid elements among them (debtors, short-term loans and prepayments) assumed at least an equal prominence to the fully liquid cash balances.

TABLE 11(a)

ANALYSIS OF ASSETS¹ AT ACCOUNTING YEAR END
All Farms (60)
1957/58, 1962/63 and 1967/68

Nature of Asset	1957/58			1962/63			1967/68			Percentage Change in Total Value 1957/58 to 1967/68
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	
	£	£		£	£		£	£		
FIXED ASSETS										
Land, buildings and vested improvements	212,564	3,543	36	351,001	5,850	35	537,300	8,955	33	+ 153
Increase due to revaluation	—	—	—	179,707	2,995	18	457,664	7,628	29	n.c.
Total Value	212,564	3,543	36	530,708	8,845	53	994,964	16,583	62	+ 368
Improvements undertaken as tenant ...	17,191	286	3	20,637	344	2	27,965	466	2	+ 63
Machinery and equipment	102,874	1,715	17	139,393	2,323	14	153,788	2,563	10	+ 49
Breeding livestock	104,837	1,747	18	126,916	2,115	13	175,671	2,928	11	+ 68
Intangible assets	—	—	—	—	—	—	390	6	**	n.c.
Total Fixed Assets	437,466	7,291	74	817,654	13,627	82	1,352,778	22,546	85	+ 209
CURRENT ASSETS										
Stock valuation	102,948	1,716	17	132,430	2,207	13	169,130	2,819	10	+ 64
Debtors, short-term loans and prepayments	23,342	389	4	29,372	490	3	43,819	730	3	+ 88
Cash at bank and in hand	32,230	537	5	23,935	399	2	30,232	504	2	— 6
Total Current Assets	158,520	2,642	26	185,737	3,096	18	243,181	4,053	15	+ 53
TOTAL ASSETS	595,986	9,933	100	1,003,391	16,723	100	1,595,959	26,599	100	+ 168

¹ See Appendix B for basis of valuation.

** Insignificant
n.c. Not calculable

TABLE 11(b)

ANALYSIS OF ASSETS¹ AT ACCOUNTING YEAR END
Wholly and Mainly Owner-occupiers (25)
1957/58, 1962/63 and 1967/68

Nature of Asset	1957/58			1962/63			1967/68			Percentage Change in Total Value 1957/58 to 1967/68
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	
	£	£		£	£		£	£		
FIXED ASSETS										
Land, buildings and vested improvements	193,386	7,735	56	239,269	9,571	45	301,500	12,060	37	+ 56
Increase due to revaluation	—	—	—	119,182	4,767	22	286,222	11,449	36	n.c.
Total Value	193,386	7,735	56	358,451	14,338	67	587,722	23,509	73	+ 204
Improvement undertaken as tenant	—	—	—	—	—	—	—	—	—	—
Machinery and equipment	41,579	1,663	12	53,286	2,131	10	57,547	2,302	7	+ 38
Breeding livestock	43,301	1,732	12	50,249	2,010	9	69,794	2,792	9	+ 61
Intangible assets	—	—	—	—	—	—	—	—	—	—
Total Fixed Assets	278,266	11,130	80	461,986	18,479	86	715,063	28,603	89	+ 157
CURRENT ASSETS										
Stock valuation	44,655	1,786	13	53,144	2,126	10	62,985	2,519	8	+ 41
Debtors, short-term loans and prepayments	9,671	387	3	12,438	497	2	15,682	627	2	+ 62
Cash at bank and in hand	14,890	596	4	9,166	367	2	13,001	520	1	— 13
Total Current Assets	69,216	2,769	20	74,748	2,990	14	91,668	3,666	11	+ 32
TOTAL ASSETS	347,482	13,899	100	536,734	21,469	100	806,731	32,269	100	+ 132

¹ See Appendix B for basis of valuation.

n.c. Not calculable

TABLE 11(c)

ANALYSIS OF ASSETS¹ AT ACCOUNTING YEAR END
Wholly and Mainly Tenants (22)
1957/58, 1962/63 and 1967/68

Nature of Asset	1957/58			1962/63			1967/68			Percentage Change in Total Value 1957/58 to 1967/68
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	
	£	£		£	£		£	£		
FIXED ASSETS										
Land, buildings and vested improvements	11,696	532	8	32,552	1,480	15	77,063	3,679	24	+ 559
Increase due to revaluation	—	—	—	3,894	177	2	13,740	448	3	n.c.
Total Value	11,696	532	8	36,446	1,657	17	90,803	4,127	27	+ 676
Improvements undertaken as tenant ...	9,780	444	6	15,158	689	7	27,965	1,271	8	+ 186
Machinery and equipment	40,662	1,848	27	58,652	2,666	27	65,032	2,956	19	+ 60
Breeding livestock	40,130	1,824	26	49,668	2,258	22	68,820	3,128	21	+ 71
Intangible assets	—	—	—	—	—	—	—	—	—	—
Total Fixed Assets	102,268	4,648	67	159,924	7,270	73	252,620	11,482	75	+ 147
CURRENT ASSETS										
Stock valuation	31,853	1,448	21	43,019	1,955	19	59,347	2,698	18	+ 86
Debtors, short-term loans and prepayments	6,952	316	5	9,122	415	4	16,068	730	5	+ 131
Cash at bank and in hand	10,361	471	7	9,206	418	4	5,125	233	2	— 51
Total Current Assets	49,166	2,235	33	61,347	2,788	27	80,540	3,661	25	+ 64
TOTAL ASSETS	151,434	6,883	100	221,271	10,058	100	333,160	15,143	100	+ 120

¹ See Appendix B for basis of valuation.

n.c. Not calculable

TABLE 11(d)

ANALYSIS OF ASSETS¹ AT ACCOUNTING YEAR END

Transfers (13)

1957/58, 1962/63 and 1967/68

Nature of Asset	1957/58			1962/63			1967/68			Percentage Change in Total Value 1957/58 to 1967/68
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	
	£	£		£	£		£	£		
FIXED ASSETS										
Land, buildings and vested improvements	7,482	575	8	79,180	6,091	33	158,737	12,210	35	+ 2,022
Increase due to revaluation	—	—	—	56,631	4,356	23	157,702	12,131	34	n.c.
Total Value	7,482	575	8	135,811	10,447	56	316,439	24,341	69	+ 4,129
Improvements undertaken as tenant ...	7,411	570	8	5,479	421	2	—	—	—	—
Machinery and equipment	20,633	1,587	21	27,455	2,112	11	31,209	2,401	7	+ 51
Breeding livestock	21,406	1,647	22	26,999	2,077	11	37,057	2,851	8	+ 73
Intangible assets	—	—	—	—	—	—	390	30	**	n.c.
Total Fixed Assets	56,932	4,379	59	195,744	15,057	80	385,095	29,623	84	+ 576
CURRENT ASSETS										
Stock valuation	26,440	2,034	27	36,267	2,790	15	46,798	3,600	10	+ 77
Debtors, short-term loans and prepayments	6,719	517	7	7,812	601	3	12,069	928	3	+ 80
Cash at bank and in hand	6,979	537	7	5,563	428	2	12,106	931	3	+ 73
Total Current Assets	40,138	3,088	41	49,642	3,819	20	70,973	5,459	16	+ 77
TOTAL ASSETS	97,070	7,467	100	245,386	18,876	100	456,068	35,082	100	+ 370

¹ See Appendix B for basis of valuation.** Insignificant
n.c. Not calculable

TABLE 12

**CHANGES IN THE VALUE OF OWNER-OCCUPIED LAND
AND BUILDINGS DUE TO REVALUATION**

All Groups

1957/58 to 1967/68

<i>Tenancy Group</i>	<i>No. of farms</i>	<i>Total Increase in Balance Sheet Value of Land</i>	<i>Increase Due To Revaluation</i>	<i>Increase Due To Revaluation as a Percentage of Total Increase</i>
All farms ...	60	£ 782,400	£ 457,664	59
Wholly and mainly owner-occupiers	25	394,336	286,222	73
Wholly and mainly tenants ...	22	79,107	13,740	17
Transfers ...	13	308,957	157,702	51

TABLE 13

ANALYSIS OF INCREASES IN VALUATION COMPONENTS

All Groups

1957/58 to 1967/68

Valuation Component	Valuation at Accounting Year End		Increase in Valuation 1957/58 to 1967/68	
	1957/58	1967/68	Amount	Per cent
	£	£	£	
ALL FARMS (60)				
Breeding livestock ...	104,837	175,671	70,834	68
Non-breeding livestock	75,865	121,825 ¹	45,960 ¹	61
Crops	22,247	35,115	12,868	58
Stores	4,304	8,745	4,441	103
Cultivations	532	3,445	2,913	548
Total	207,785	344,801	137,016	66
OWNER-OCCUPIERS (25)				
Breeding livestock ...	43,301	69,794	26,493	61
Non-breeding livestock	31,201	43,898 ²	12,697 ²	41
Crops	11,359	15,581	4,222	37
Stores	1,990	3,356	1,366	69
Cultivation	105	150	45	43
Total	87,956	132,779	44,823	51
TENANTS (22)				
Breeding livestock ...	40,130	68,820	28,690	71
Non-breeding livestock	23,562	41,026 ³	17,464 ³	74
Crops	6,178	11,626	5,448	88
Stores	1,686	3,400	1,714	102
Cultivations	427	3,295	2,868	672
Total	71,983	128,167	56,184	78
TRANSFERS (13)				
Breeding livestock ...	21,406	37,057	15,651	73
Non-breeding livestock	21,102	36,901 ⁴	15,799 ⁴	75
Crops	4,710	7,908	3,198	68
Stores	628	1,989	1,361	217
Cultivations	—	—	—	—
Total	47,846	83,855	36,009	75

1 Includes increase of £14,604 due to revaluation.

2 Includes increase of £5,090 due to revaluation.

3 Includes increase of £6,843 due to revaluation.

4 Includes increase of £2,671 due to revaluation.

TABLE 14(a)

ANALYSIS OF TENANT'S ASSETS AT ACCOUNTING YEAR END

All Farms (60)

1957/58, 1962/63 and 1967/68

Nature of Tenant's Asset	1957/58			1962/63			1967/68		
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent
	£	£'		£	£		£	£	
FIXED ASSETS									
Machinery and equipment	102,874	1,715	28	139,393	2,323	31	153,788	2,563	27
Breeding livestock	104,837	1,747	29	126,916	2,115	28	175,671	2,928	31
Intangible assets	—	—	—	—	—	—	390	6	**
Total Tenant's Fixed Assets	<u>207,711</u>	<u>3,462</u>	<u>57</u>	<u>266,309</u>	<u>4,438</u>	<u>59</u>	<u>329,849</u>	<u>5,497</u>	<u>58</u>
CURRENT ASSETS									
Stock valuation	102,948	1,716	28	132,430	2,207	29	169,130	2,819	29
Debtors, short-term loans and prepayments	23,342	389	6	29,372	490	7	43,819	730	8
Cash at bank and in hand	32,230	537	9	23,935	399	5	30,232	504	5
Total Tenant's Current Assets	<u>158,520</u>	<u>2,642</u>	<u>43</u>	<u>185,737</u>	<u>3,096</u>	<u>41</u>	<u>243,181</u>	<u>4,053</u>	<u>42</u>
TOTAL TENANT'S ASSETS	<u>366,231</u>	<u>6,104</u>	<u>100</u>	<u>452,046</u>	<u>7,534</u>	<u>100</u>	<u>573,030</u>	<u>9,550</u>	<u>100</u>

** Insignificant

TABLE 14(b)

ANALYSIS OF TENANT'S ASSETS AT ACCOUNTING YEAR END
Wholly and Mainly Owner-occupiers (25)
1957/58, 1962/63 and 1967/68

<i>Nature of Tenant's Asset</i>	1957/58			1962/63			1967/68		
	<i>Total</i>	<i>Per farm</i>	<i>Per cent</i>	<i>Total</i>	<i>Per farm</i>	<i>Per cent</i>	<i>Total</i>	<i>Per farm</i>	<i>Per cent</i>
FIXED ASSETS	£	£		£	£		£	£	
Machinery and equipment	41,579	1,663	27	53,286	2,131	30	57,547	2,302	26
Breeding livestock	43,301	1,732	28	50,249	2,010	28	69,794	2,792	32
Intangible assets	—	—	—	—	—	—	—	—	—
Total Tenant's Fixed Assets	84,880	3,395	55	103,535	4,141	58	127,341	5,094	58
CURRENT ASSETS									
Stock valuation	44,655	1,786	29	53,144	2,126	30	62,985	2,519	29
Debtors, short-term loans and prepayments	9,671	387	6	12,438	497	7	15,682	627	7
Cash at bank and in hand	14,890	596	10	9,166	367	5	13,001	520	6
Total Tenant's Current Assets	69,216	2,769	45	74,748	2,990	42	91,668	3,666	42
TOTAL TENANT'S ASSETS	154,096	6,164	100	178,283	7,131	100	219,009	8,760	100

TABLE 14(c)

ANALYSIS OF TENANT'S ASSETS AT ACCOUNTING YEAR END

Wholly and Mainly Tenants (22)

1957/58, 1962/63 and 1967/68

Nature of Tenant's Asset	1957/58			1962/63			1967/68		
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent
	£	£		£	£		£	£	
FIXED ASSETS									
Machinery and equipment	40,662	1,848	31	58,652	2,666	35	65,032	2,956	30
Breeding livestock	40,130	1,824	31	49,668	2,258	29	68,820	3,128	32
Intangible assets	—	—	—	—	—	—	—	—	—
Total Tenant's Fixed Assets	<u>80,792</u>	<u>3,672</u>	<u>62</u>	<u>108,320</u>	<u>4,924</u>	<u>64</u>	<u>133,852</u>	<u>6,084</u>	<u>62</u>
CURRENT ASSETS									
Stock valuation	31,853	1,448	25	43,019	1,955	25	59,347	2,698	28
Debtors, short-term loans and prepayments	6,952	316	5	9,122	415	5	16,068	730	8
Cash at bank and in hand	10,361	471	8	9,206	418	6	5,125	233	2
Total Tenant's Current Assets	<u>49,166</u>	<u>2,235</u>	<u>38</u>	<u>61,347</u>	<u>2,788</u>	<u>36</u>	<u>80,540</u>	<u>3,661</u>	<u>38</u>
TOTAL TENANT'S ASSETS	<u>129,958</u>	<u>5,907</u>	<u>100</u>	<u>169,667</u>	<u>7,712</u>	<u>100</u>	<u>214,392</u>	<u>9,745</u>	<u>100</u>

TABLE 14(d)

ANALYSIS OF TENANT'S ASSETS AT ACCOUNTING YEAR END

Transfers (13)

1957/58, 1962/63 and 1967/68

Nature of Tenant's Asset	1957/58			1962/63			1967/68		
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent
	£	£		£	£		£	£	
FIXED ASSETS									
Machinery and equipment	20,633	1,587	25	27,455	2,112	26	31,209	2,401	22
Breeding livestock	21,406	1,647	26	26,999	2,077	26	37,057	2,851	27
Intangible assets	—	—	—	—	—	—	390	30	**
Total Tenant's Fixed Assets	<u>42,039</u>	<u>3,234</u>	<u>51</u>	<u>54,454</u>	<u>4,189</u>	<u>52</u>	<u>68,656</u>	<u>5,282</u>	<u>49</u>
CURRENT ASSETS									
Stock valuation	26,440	2,034	32	36,267	2,790	35	46,798	3,600	33
Debtors, short-term loans and prepayments	6,719	517	8	7,812	601	8	12,069	928	9
Cash at bank and in hand	6,979	537	9	5,563	428	5	12,106	931	9
Total Tenant's Current Assets	<u>40,138</u>	<u>3,088</u>	<u>49</u>	<u>49,642</u>	<u>3,819</u>	<u>48</u>	<u>70,973</u>	<u>5,459</u>	<u>51</u>
TOTAL TENANT'S ASSETS	<u>82,177</u>	<u>6,322</u>	<u>100</u>	<u>104,096</u>	<u>8,008</u>	<u>100</u>	<u>139,629</u>	<u>10,741</u>	<u>100</u>

** Insignificant

IV

THE STRUCTURE OF LIABILITIES 1957/58, 1962/63 AND 1967/68

By virtue of the nature of the balance sheet's construction, the overall increases in the level of total liabilities revealed for the parent and for the three subsidiary farm groupings over the study period will exactly parallel the increases reported in the last section which relate to the level of total assets. Attention can, therefore, be directed immediately to the discernible trends in the level of the three main sources of farming capital: long-term borrowings, short-term credit and the farmer's own resources depicted by his net worth position. Examination of the latter, incidentally, will follow a similar procedure to that adopted in the previous section for the review of the trend in the value of assets held in the form of land and buildings and separately distinguish the contribution to the observed change in net worth attributable to the revaluation of land and buildings which was undertaken as part of the study. Any increase arising on revaluation of an asset will, of course, accrue to the net worth of the owner of the business.

Reference to the contents of Table 15(a) shows that, in the face of a threefold increase in long-term borrowings (198 per cent) and an increase of two and a half times in utilised short-term credit facilities (144 per cent), the 60 farmers as a whole were able to maintain their share of the total funds invested in their combined businesses only as a result of the net worth increases deemed to arise in the wake of increasing agricultural land values. In the event, therefore, the total net worth of the 60 farmers is seen to have increased in almost exactly the same proportion as total liabilities which rose by 168 per cent and to account for a virtually unchanged share of total liabilities.

As in the case of the investigation into changes in asset structure within the sample, however, the figures for All Farms tend to conceal a number of marked differences which are present in the comparable figures for the component sub-groups. These are made apparent by Tables 15(b), 15(c), and 15(d). In the case of the owner-occupiers, for example, long-term borrowings actually fell by nine per cent as loan repayments exceeded new borrowings, and borrowing from short-term sources increased by only 78 per cent. The effect of these trends, coupled with the accrual of net worth increases on the revaluation of land, resulted in a decline in the relative importance of borrowed funds within the structure of liabilities and a corresponding improvement in their net worth position which rose from 83 per cent to 90 per cent.

Both the tenants and the farms which changed from tenant to owner-occupation saw their equity diminish, however: from 79 to 66 per cent and from 86 per cent to 81 per cent respectively.

In both cases this occurred as a result of increased borrowing, particularly from long-term sources for the purposes of land purchase. The proportional importance of long-term debt capital increased, in fact, from two to 11 per cent for the group of tenants and from one to ten per cent for those who "transferred" from a tenant's status to that of an owner-occupier. Both groups also resorted to a greater use of short-term credit but in the case of the transfers the level of long-term borrowing in the latter part of the study period was such as to obscure the real trend in the

use of this form of credit and to distort its relative importance within the structure of liabilities.

Further examinations of the fall in the level of long-term borrowing on the part of the owner-occupiers and of the increase in the level of such borrowings which occurred within the tenant and transfer groups both reveal the traditional attachment of the farming community to the family and to private connections as sources of additional farming capital. Thus, for the owner-occupiers the repayment of long-term loans and mortgages consisted in the main of the refunding of family and other private lenders who, at the outset of the study period, collectively subscribed nine per cent of the total funds employed in the consolidated business represented by this group of farms as a whole and, at its conclusion, three per cent. Institutional and bank lending, on the other hand, remained at a modest one to two per cent throughout the ten-year period.

Among the continuing tenants and those whose status of owner-occupier was acquired only during the study period there is some evidence, in the changing pattern of their long-term loan structure which accompanied the trend to land ownership, to suggest either a greater willingness or a greater need to employ the more public of the lending agencies than existed among those who were already wholly or mainly owner-occupiers in 1958/59: thus, for the two groups in question, borrowings on a long-term basis from institutions and banks amounted in 1967/68 to five and six per cent of total liabilities respectively in circumstances where total long-term loans correspondingly amounted to 11 and 10 per cent of total funds. Nevertheless, it is evident that, for the farms included in this sample at least, family and privately-derived finance continued to be a very important source of borrowed funds throughout the period from 1957/58 to 1967/68.

The observed increases in the level of short-term liabilities—least in the case of owner-occupiers where they rose by 78 per cent and greatest for the transfers where the increase recorded was of the order of three and a quarter times—also show considerable variation in their individual composition when the three sub-groups are compared. The average creditor bill per farm in 1957/58 amounted to roughly £700 for each group: by 1967/68, however, this had more than doubled in the case of the tenants and the transfers but had increased by only a quarter in the case of the owner-occupiers. Similarly, the total credit extended in the form of bank overdrafts nearly trebled in the case of the owner-occupiers and tenants but went up by more than five times for those who became owner-occupiers during the span of the study.

Generally, however, a comparison of the trends in sundry creditor balances and in short-term credit extended by the joint stock banks (the two sources which together accounted throughout the period for all but a fraction of the current liabilities of each group) reveal that it was bank overdrafts which increased at the faster rate. But having said this it must be stressed that too much reliance should not be placed on isolated changes in the separate components of liabilities or indeed in the separate components of current assets as both these sensitive areas of the balance sheet structure reflect the constantly changing picture of the production processes of a business or group of businesses. The picture represented is one where materials are continually being bought on credit and then trans-

formed into crop or livestock products which, after a possible period of storage, are often sold on credit before cash is received with which creditors' bills can be settled. In consequence the various items comprising current assets and current liabilities can vary considerably according to the time in the farm business calendar at which the balance sheet is struck. The significance of the changes in the structure of the liabilities and the assets of the sample farms which have been described in this and in the previous section, therefore, will be more easily assessed within the context of the overall movement of funds through the businesses comprising the study sample and in the light of the changes which can be seen to have occurred in the relationships between the main components of the financial structure. This will be the principal task of the next two sections of this report.

TABLE 15(a)

ANALYSIS OF LIABILITIES AT ACCOUNTING YEAR END
All Farms (60)
1957/58, 1962/63 and 1967/68

Nature of Liability	1957/58			1962/63			1967/68			Percentage Change in Total Value 1957/58 to 1967/68
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	
NET WORTH (unadjusted) ¹	£ 490,130	£ 8,169	82	£ 622,892	£ 10,382	62	£ 859,149	£ 14,319	54	+ 34
Increase due to revaluation	—	—	—	179,707	2,995	18	457,664	7,628	29	n.c.
Adjusted Net Worth	490,130	8,169	82	802,599	13,377	80	1,316,813	21,947	83	+ 169
LONG AND MEDIUM-TERM LOANS										
Institutional	2,858	48	1	8,485	141	1	36,447	608	2	+ 1,175
Bank	—	—	—	4,000	67	**	11,960	199	1	n.c.
Family	22,999	383	4	32,515	542	3	44,709	745	3	+ 94
Other private	12,500	208	2	18,020	300	2	20,545	342	1	+ 64
Other	200	3	**	122	2	**	1,127	19	**	+ 464
Total Long and Medium-term Loans	38,557	642	7	63,142	1,052	6	114,788	1,913	7	+ 198
CURRENT LIABILITIES										
Hire purchase	677	11	**	1,818	30	**	1,310	22	**	+ 94
Accumulated charges	640	11	**	7,331	122	1	11,259	187	1	+ 1,659
Sundry creditors	41,373	690	7	54,829	914	6	72,413	1,207	4	+ 75
Bank overdrafts	24,009	400	4	72,656	1,211	7	79,376	1,323	5	+ 231
Other	600	10	**	1,016	17	**	—	—	—	— 100
Total Current Liabilities	67,299	1,122	11	137,650	2,294	14	164,358	2,739	10	+ 144
TOTAL LIABILITIES	595,986	9,933	100	1,003,391	16,723	100	1,595,959	26,599	100	+ 168

¹ Excluding any increase due to revaluation.

** Insignificant
n.c. Not calculable

TABLE 15(b)

ANALYSIS OF LIABILITIES AT ACCOUNTING YEAR END
Wholly and Mainly Owner-occupiers (25)
1957/58, 1962/63 and 1967/68

Nature of Liability	1957/58			1962/63			1967/68			Percentage Change in Total Value 1957/58 to 1967/68
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	
NET WORTH (unadjusted) ¹	£ 286,708	£ 11,468	83	£ 346,393	£ 13,856	65	£ 442,851	£ 17,714	54	+ 54
Increase due to revaluation	—	—	—	119,182	4,767	22	286,222	11,449	36	n.c.
Adjusted Net Worth	286,708	11,468	83	465,575	18,623	87	729,073	29,163	90	+ 154
LONG AND MEDIUM-TERM LOANS										
Institutional	2,758	110	1	2,758	110	1	2,933	117	1	+ 6
Bank	—	—	—	4,000	160	1	2,741	110	**	n.c.
Family	19,931	797	6	16,527	661	3	18,322	733	2	— 8
Other private	12,000	480	3	8,000	320	1	7,000	280	1	— 42
Other	200	8	**	—	—	—	682	27	**	+ 241
Total Long and Medium-term Loans	34,889	1,395	10	31,285	1,251	6	31,678	1,267	4	— 9
CURRENT LIABILITIES										
Hire purchase	—	—	—	138	6	**	—	—	—	—
Accumulated charges	50	2	**	2,283	91	**	472	19	**	+ 844
Sundry creditors	17,674	707	5	17,657	706	3	21,531	861	3	+ 22
Bank overdrafts	8,161	327	2	19,796	792	4	23,977	959	3	+ 194
Other	—	—	—	—	—	—	—	—	—	—
Total Current Liabilities	25,885	1,036	7	39,874	1,595	7	45,980	1,839	6	+ 78
TOTAL LIABILITIES	347,482	13,899	100	536,734	21,469	100	806,731	32,269	100	+ 132

¹ Excluding any increase due to revaluation.

** Insignificant
n.c. Not calculable

TABLE 15(c)

ANALYSIS OF LIABILITIES AT ACCOUNTING YEAR END
Wholly and Mainly Tenants (22)
1957/58, 1962/63 and 1967/68

Nature of Liability	1957/58			1962/63			1967/68			Percentage Change in Total Value 1957/58 to 1967/68
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	
NET WORTH (unadjusted) ¹	£ 120,419	£ 5,474	79	£ 142,573	£ 6,481	64	£ 204,661	£ 9,479	63	+ 70
Increase due to revaluation	—	—	—	3,894	177	2	13,740	448	3	n.c.
Adjusted Net Worth	120,419	5,474	79	146,467	6,658	66	218,401	9,927	66	+ 81
LONG AND MEDIUM-TERM LOANS										
Institutional	100	4	**	100	5	**	15,632	710	5	+ 15,532
Bank	—	—	—	—	—	—	1,000	46	**	n.c.
Family	1,850	84	2	12,000	545	5	18,550	843	5	+ 903
Other private	500	23	**	895	40	1	2,795	127	1	+ 459
Other	—	—	—	122	6	**	131	6	**	n.c.
Total Long and Medium-term Loans	2,450	111	2	13,117	596	6	38,108	1,732	11	+ 1,455
CURRENT LIABILITIES										
Hire purchase	477	22	**	1,525	69	1	1,271	58	**	+ 166
Accumulated charges	579	26	**	5,048	230	2	9,850	448	3	+ 1,601
Sundry creditors	14,654	666	10	25,303	1,150	11	30,511	1,387	9	+ 108
Bank overdrafts	12,255	557	8	29,811	1,355	14	35,019	1,591	11	+ 186
Other	600	27	1	—	—	—	—	—	—	— 100
Total Current Liabilities	28,565	1,298	19	61,687	2,804	28	76,651	3,484	23	+ 168
TOTAL LIABILITIES	151,434	6,883	100	221,271	10,058	100	333,160	15,143	100	+ 120

¹ Excluding any increase due to revaluation.

** Insignificant
n.c. Not calculable

TABLE 15(d)

ANALYSIS OF LIABILITIES AT ACCOUNTING YEAR END
Transfers (13)
1957/58, 1962/63 and 1967/68

Nature of Liability	1957/58			1962/63			1967/68			Percentage Change in Total Value 1957/58 to 1967/68
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	
NET WORTH (unadjusted) ¹	£ 83,003	£ 6,385	86	£ 133,926	£ 10,302	55	£ 211,637	£ 16,279	47	+ 155
Increase due to revaluation	—	—	—	56,631	4,356	23	157,702	12,131	34	n.c.
Adjusted Net Worth	83,003	6,385	86	190,557	14,658	78	369,339	28,410	81	+ 345
LONG AND MEDIUM-TERM LOANS										
Institutional	—	—	—	5,627	433	2	17,882	1,376	4	n.c.
Bank	—	—	—	—	—	—	8,219	632	2	n.c.
Family	1,218	94	1	3,988	307	1	7,837	603	2	+ 543
Other private	—	—	—	9,125	702	4	10,750	827	2	n.c.
Other	—	—	—	—	—	—	314	24	**	n.c.
Total Long and Medium-term Loans	1,218	94	1	18,740	1,442	7	45,002	3,462	10	+ 3,595
CURRENT LIABILITIES										
Hire purchase	200	15	**	155	12	**	39	3	**	— 80
Accumulated charges	11	1	**	—	—	—	937	72	**	+ 8,418
Sundry creditors	9,045	696	9	11,869	913	5	20,371	1,567	4	+ 125
Bank overdrafts	3,593	276	4	23,049	1,773	9	20,380	1,568	5	+ 467
Other	—	—	—	1,016	78	1	—	—	—	—
Total Current Liabilities	12,849	988	13	36,089	2,776	15	41,727	3,210	9	+ 225
TOTAL LIABILITIES	97,070	7,467	100	245,386	18,876	100	456,068	35,082	100	+ 370

¹ Excluding any increase due to revaluation.

** Insignificant
n.c. Not calculable

V

SOURCES AND DISPOSALS OF FARMING FUNDS 1958/59 TO 1967/68

This section utilises the characteristics of the balance sheet which enable it to function as a record of the flow of funds through a business during a given accounting period. Although in normal business practice that period will usually be a year it can, with equal validity, be of any duration and, for the purposes of this stage of the study, the complete period of ten years has been regarded as a single accounting period the limits of which are determined by aggregated opening balance sheet positions for 1958/59 and the aggregated closing balance sheet positions for 1967/68. On this basis, data have been assembled in a manner which conveniently depicts both the sources of the additional funds employed within the businesses during the ten-year period and their allocation.

Before turning to a review of the more salient features of this material, however, it will perhaps be useful to consider the nature of some of the categories which have been adopted in presenting the information relating to the aggregated funding operations of the sample farm businesses.

The total funds available for disposal have been divided into two main categories: those which derive from farm-based transactions and operations; and those which can be regarded as emanating from sources which are external to the farm business. The first of these two categories will include, as its most important component, funds internally generated as profit as a result of the production process.¹ As indicated in an earlier section of this report the measure of profit which has been considered appropriate for the determination of available funds for disposal has been derived by making the relevant adjustments to net farm income. These adjustments are principally concerned with the removal from net farm income of any elements of an imputed nature which have been charged or credited to the trading and profit and loss account for comparative purposes. Prominent among these will be any imputed charge for depreciation. While the actual cost of depreciation will eventually fall to be met as equipment is replaced, it is usually deemed appropriate to spread, by means of an imputed depreciation charge, the incidence of such a cost over the accounting periods coinciding with the period of the machine's use. Clearly by so doing, however, there is no curtailment of the funds available for use within the farm business and any imputed charge for depreciation must be added back to obtain a measure of disposable profit. The modified net farm income figure used here as a basis for such a measure has been designated "farm earnings".

Funds generated in the form of farm earnings will be supplemented by other farm-derived funds realised as a result of the sale of fixed capital assets such as land and equipment and any run-down in the level of current physical and financial assets (live and deadstock inventories, debtor balances and liquid cash holdings).

¹ Where, in the case of an individual farm business, a trading loss was incurred this has been treated as a negative profit for the purposes of sample aggregation and thus included on the "sources" side of the "sources and disposals of funds" exercise. In other circumstances such a loss might alternatively be included on the "allocation" side as a dissipation of "other" available funds.

The second main category of funds—those derived from sources outside the farm sector—consists of funds injected into the business by way of Exchequer support for capital schemes of improvements and for certain items of farm equipment; of funds introduced into the business by the farmer in his rôle as another lender of funds to the business; and, lastly, of funds which may be raised by the owner of the business through the medium of the various long and short-term credit agencies available to him.

The allocation of these funds is seen as involving their direction to one or other of four main areas of utilisation: first, funds may be allocated to the various areas of farm investment which include the purchase of land, the carrying-out of improvements to land and buildings, the purchase of machinery and equipment and the building up of stocks of working assets and a fund of working capital; second, funds will be withdrawn from the business, in the context of the typical family farm unit, for meeting personal living expenses; third, as the opportunity presents itself, funds may be withdrawn from the business and held, with a greater or lesser degree of permanence, as off-farm reserves; and fourthly, funds may be directed to the reduction of outstanding debt obligations.

Reference to the group of tables numbered 16(a) to 16(d) shows that in the case of all three individual tenancy groups, farm earnings contributed the major portion of the additional funds deployed within the aggregated farm businesses during the ten-year period, that contribution varying from 74 per cent in the owner-occupier group to 60 per cent for those who changed their status from tenant to owner-occupier at some point during the study period. Funds from the sale of capital assets (land, machinery and equipment) contributed a further five to ten per cent of total available funds making the overall contribution of the farm sector to the latter nearly four-fifths in the case of the owner-occupiers, three-quarters for the tenants and two-thirds for the transfers.

However, the three groups exhibit a number of significant differences. Thus, the group consisting of the farms which acquired the freehold of the greater proportion of their land during the study period are seen, not surprisingly in view of the amount of land purchase undertaken, to have been involved, on average, in the disposition of a much larger volume of funds between 1958/59 and 1967/68 than was the case in the other two groups during the same period. The volume of funds flowing in the transfer group, measured on a per farm basis, was, in fact, of the order of one-third greater than the volume recorded for the two stable tenancy groups.

By the nature of the purposes to which they were directed and the magnitude of the sums involved it was only to be expected that these additional funds would be derived from external sources and it is, therefore, the special circumstances of these transitional farms which are seen to give rise to the pronounced emphasis on non-farm sources of finance which they exhibit. Nevertheless, it should be noted that over half these external funds (amounting to 17 per cent of total disposable funds) were provided by the farmer himself and only a quarter of the external funds (eight per cent of all disposable funds) were in the form of long or medium-term loans.

Among those farms remaining essentially tenants throughout the period, land-buying on a reduced but still substantial scale also resulted

in externally-derived funds contributing a quarter of all disposable funds but, again, nearly half of these came from the farmer and only a fifth from sources of long and medium-term credit.

In the case of the owner-occupiers—where the degree of internal funding was more evident and funding from external sources amounted to just over 20 per cent—there was actually a net decrease in longer-term borrowing as repayments exceeded new loans; in these circumstances funds contributed by the farmers in their personal capacity, accounting as they did for nearly three-quarters of all external funds, could still claim a 16 per cent share of all disposable funds.

Government grants towards the cost of providing certain fixed assets represented only a small fraction of the total funds disposed of by each of the three tenancy groups but, at three per cent, that fraction was greatest in the case of the long-standing owner-occupiers who might reasonably be expected to have made more use of grant-attracting schemes of improvement than the other two groups.

The financing of the farm business from short-term sources—principally by means of the increased use of bank overdraft facilities and the increased use of merchants' credit—was a feature of all three sub-groups and accounted for seven per cent of all funds flowing through the tenant group, six per cent of all funds disposed of by the transfers but only two per cent of the total disposable funds of the owner-occupiers.

A comparison of the pattern of fund allocation adopted by each of the three sub-groups over the ten-year period reveals again the much larger volume of total funds per farm which flowed in the case of the land-buying "transfer" farms. Thirty per cent of these funds was devoted to the purchase of land and the carrying out of improvements and a further 15 per cent to the purchase of machinery. With an overall increase in inventory assets and financial assets absorbing another nine per cent of total funds, investment within the farming sector attracted some 54 per cent of all funds available for disposal.

Not much less than a half of all the funds flowing through the aggregated businesses of this group of farms are, therefore, seen to have been directed to areas outside the farm sector proper notwithstanding the heavy expenditure in this group on fixed assets in the form of land and buildings. These "exported" funds will have been used in meeting charges on borrowed money, tax liability on earned and unearned income, life insurance commitments and personal living expenses (together accounting for 40 per cent of all allocated funds) and in funding off-farm investments and reserves (which claimed a further six per cent of all funds). Should this proportion of funds going to off-farm destinations appear high in view of the increase in borrowing, both of a long-term and a short-term nature, which occurred during the same period it should be noted, first of all, that funds introduced by the proprietor during the ten-year period greatly exceed transfers to off-farm reserves; secondly, that many of the outgoings embodied in the drawings figure represent expenditure which is largely inescapable: for example, tax payments and funds required for the maintenance of a minimum standard of living; and, thirdly, to the extent that farm investment was funded by means of additional borrowed funds in the form of farm loans and mortgages, this will have increased the level

of outgoings from the farm business by generating increased interest charges.

In the other two sub-groups, where rather lower overall levels of funding were encountered as a result of the reduced scale of spending on land and buildings, the direction of funds to areas outside the farm business featured even more prominently in the disposal pattern amounting to 52 per cent in the case of tenants and 60 per cent in the case of owner-occupiers. Within this non-farming element of disposals transfers of funds to off-farm reserves by these two groups were greater, both proportionately and in terms of total amount per farm, than in the group which changed their tenure status but, again, it should be noted that the amounts of those transfers to reserves were exceeded in each case by the level of funds introduced into the business by the farmer.

The irretrievable outgoings, represented within the broad analysis of fund disposal by "drawings", were slightly lower, on a per farm basis, for the stable tenancy groups than for those transferring to owner-occupation from tenant status but the order of magnitude of these drawings was such—just over £14,000 and just under £13,000 per farm for owner-occupiers and tenants respectively out of a movement of funds totalling around £30,500 per farm in both cases—that their share alone of all allocated funds came to 46 per cent for the owner-occupiers and 42 per cent for the tenants.

Only in the case of the owner-occupiers was a net decrease in long and medium-term borrowing recorded and, even here, that decrease accounted for only a modest one per cent of available funds. This situation is doubtless a reflection both of the generally low level of gearing¹ found in British agriculture and of the prominence of family lending, with fairly lax repayment arrangements, within this limited volume of funding from outside sources.

Within the sector of farm investment the owner-occupiers and the tenants are seen to have directed closely similar proportions of their available funds to the acquisition of fixed assets in the form of land and buildings (17 and 16 per cent respectively) and also to increasing the level of their investment in physical and financial working assets (which together claimed seven and nine per cent of the group's funds respectively) but the group of tenants is distinguished by a level of investment in farm machinery which attracted nearly a quarter of this group's available funds compared with 15 and 16 per cent for the other two groups.

The remaining part of this section is devoted to rather more detailed analyses of some of the main categories of sources and disposals of funds. These have been undertaken in the hope that the resulting information will either be of intrinsic interest or afford a useful basis of comparison with data available from other related enquiries.² An exception has been made,

¹ The concept of 'gearing' is briefly described in a later section of this report (Section VII, page 84) and certain of its implications demonstrated in Appendix E to the report on page 130.

² For example, the continuing Survey of Investment in Farm Land, Buildings, Works and Machinery which is being undertaken on the Farm Management Survey sample of farms in England and Wales by University Departments and Units of Agricultural Economics on behalf of the Ministry of Agriculture, Fisheries, and Food.

however, in the case of the analysis undertaken into the nature of the funds moving in both directions across the more strictly defined boundaries of the farm business: that is, funds which in Tables 16(a) to 16(d) are grouped respectively under the captions of "Funds introduced by farmer", "Personal drawings and charges on income", and "Transfers to off-farm investments and reserves". In view of the scope of this analysis it has been accorded separate treatment in the following section.

Tables 17 and 18 provide a break-down of the investment pattern in respect of improvements to land and buildings and of the related pattern of grant-aid for the 60 farms included in the present study during the ten years from 1958/59 to 1967/68. While these tables, read in conjunction with Tables 16(a) to 16(d), indicate that, for the sample as a whole, such expenditure on improvements was exceeded by expenditure on the actual acquisition of land, reference to the data for the three sub-groups shows that this was not uniformly the case. For the group of owner-occupiers, expenditure over the ten years on improvements amounted, in gross terms, to £3,584 per farm out of an average total capital expenditure on land and buildings of £5,428 per farm. In the other two groups, however, where the trend to owner-occupation was still very much a continuing process, expenditure per farm on the purchase of land substantially exceeded the total expenditure per farm on improvements. Despite this fact the level of improvements undertaken by the group of farmers which changed their status in favour of owner-occupation did not fall very far short of that achieved by the owner-occupiers proper—£3,337 per farm compared with £3,584. Gross expenditure on improvements by the group of tenants was, naturally, well below these levels and amounted to only £1,401 per farm over the ten-year period.

The effect of grant-aid was to reduce the overall cost to the farmer of improvements undertaken in the various groups as an owner-occupier by between 22 and 26 per cent. Grant-aid as a proportion of gross expenditure for the more limited improvements carried out as a tenant was much less consistent ranging, for the two sub-groups concerned, from 15 to 30 per cent and averaging only 18 per cent for total expenditure by tenants on improvements to land and buildings.

The most striking pattern to emerge from the analysis of gross and net expenditure on improvements, presented in Table 17, is perhaps the consistency of the distribution of investment between the four main categories of land, buildings, services (i.e. water and electricity) and farm houses (including service cottages). For the whole sample of 60 farms and the two tenancy groups within the sample which most reflected the trend to owner-occupation, the proportions of both total gross and total net expenditure directed to farm improvements in each of these four main areas varied only between relatively narrow limits as follows:¹ improvements to land, an unvarying ten per cent (eight to nine per cent); to buildings, 60–63 per cent (60–62 per cent); to services, 10–12 per cent (10–12 per cent); to farmhouses and farm cottages, 16–19 per cent (18–22 per cent).

The corresponding figures for the group of tenants with their much lower level of expenditure on improvements were: improvements to land,

¹ The figures for gross expenditure are shown first followed, in parenthesis, by the figures relating to expenditure net of Government and Local Authority grants.

11 per cent (10 per cent); to buildings, 60 per cent (63 per cent); to services, 22 per cent (18 per cent); and to farmhouse and farm cottages, seven per cent (nine per cent).

The changes which occurred in the valuation inventory (livestock, crops, stores and cultivations) have already been described in Section III in connection with the analysis of the structure of assets. However, it may be convenient if the data presented earlier, in Table 13, is re-arranged in order to show the composition of the disposal of funds in this particular area of the farm business for the various sub-groups of the sample. This has been done in Table 19 which shows that, in the case of all groups, the increase witnessed in the valuation of tenant's assets (other than machinery) consisted very largely of an increase in the value of livestock. Increases in the value of breeding and non-breeding livestock together, in fact, accounted for between 82 and 87 per cent of the overall valuation change with crops, stores and cultivations, in that general order of importance, contributing only small proportions to the total change.

The analysis of sources and disposals of funds during the ten-year period described in Tables 16(a) to 16(d) depicted only the overall movement of funds within the farm business either from, or back to, the long or short-term sources of credit. A more detailed analysis of the composition of this flow of credit may be of interest not only for its own sake but also as a means of achieving a better appreciation of the factors underlying the changes which occurred in the structure of external liabilities over the study period already described in Section IV.

This more detailed examination has been undertaken in Table 20(a) for long and medium-term lending sources and in Table 20(b) for current liabilities and short-term loans. In neither of these tables, it should be noted, was it considered that any useful purposes would be served by the inclusion of figures on a "per farm basis" in view of the relatively few farms employing many of the individual sources specified.

It will be immediately apparent that for the tenant and the transfer groups the changes which occurred in the employed sources of credit were all in the direction of increased use. In the case of the tenants the family element of private sources, with 47 per cent, and the Agricultural Mortgage Corporation, with 41 per cent, between them accounted for the major share of the additional credit raised. For the transfers, however, the commercial banks (to the extent of 19 per cent) and non-family private sources (24 per cent) joined family sources and the A.M.C. as important contributors of long-term credit although the latter supplied the largest single share with 37 per cent.

The additional use of long-term credit facilities by the group of owner-occupiers was, expectedly, on a very much more limited scale and was, in fact, exceeded by funds directed to the repayment of outstanding debt. These repayments, moreover, reflect again the predominantly private nature of the long-term credit structure of the owner-occupiers at the outset of the study period.

Table 20(a) distinguishes between long-term credit, where repayment is effected over a period of ten years or more, and medium-term loans repayable over periods in excess of one year but less than ten; but, in the event, the movement of funds which fell in this latter category was found to be quite insignificant consisting only of the extinction of a small Local

Authority loan. It is important to note, in view of the contrasting pictures presented by the group of owner-occupiers on the one hand and the groups of the tenants and the transfers on the other, that the figures relating to the overall sample of 60 farms tend to conceal significant differences within that sample and to obscure their relationship to a changing tenure structure.

A greater measure of conformity among the three sub-groups is discernible, however, in the overall change in the short-term funding of the farm business. Table 20(b) reveals that, except in the case of hire purchase debt and the miscellaneous category of "other short-term loans", there was a fairly general net increase in the use of short-term credit sources. The two main sources of such credit were, of course, the commercial banks who were the main suppliers followed by the various merchants, tradesmen, and professional people supplying goods and services to farmers on the normal bases of trade credit. A number of factors undoubtedly underly this net increase in short-term credit: an increase in the physical volume of production, the declining value of money and an extension of the average period within which trade bills are normally settled. It is impossible to assess, without a very detailed examination of the relevant data, the relative importance of these various factors but it should at least be noted that the increase in the level of accumulated charges (that is, outstanding accounts which have not been cleared within the ensuing accounting year) which was recorded in all three sub-groups, but particularly in the tenants' group, is not in itself indicative of a general tendency to delay the payment of accounts as it can be attributed to the rather special circumstances operating in a small number of cases.

Hire purchase debt (for which there was some evidence of an increase among the tenants, a small decrease in the transfer group and an overall unchanged position for the owner-occupiers) was a comparatively little used source of short-term credit while the miscellaneous category of "other short-term loans" (which showed an overall decrease) is an unreliable indicator of trends in short-term credit financing embodying as it does a number of intermittent and very temporary loans from the wives of farmers to their husbands. It must be emphasized, moreover, that the change in loan financing depicted by Tables 20(a) and 20(b) are *net* changes over the period from 1958/59 to 1967/68. Some of the annual changes which occurred within that span of time will, however, be found in Tables iv(a) to iv(d) in Appendix D to this report.

The general increase in short-term borrowing—particularly from the commercial banks and by way of an extension of merchant credit—which is referred to above and which is indicative of a situation characterised by a shortage of liquid funds was accompanied by significant movements within the overall increase in liquid assets depicted in Tables 16(a) to 16(d). A breakdown of this latter increase, as in Table 21, shows that its main components are a substantial increase in sundry debtors in all groups and a decrease in the level of positive bank balances in all but the smallest group formed by the transfer farms.¹ None of the trends revealed by these

¹ The increase in the level of positive bank balances in the group of transfer farms will be seen, on inspection of the data contained in Appendix C, Table iii (d) to have been due to the rather exceptional circumstances of the final year of the period when those balances were swollen by the inflow of funds as a result of the coincidental realisation, by a number of farmers in the group, of substantial holdings of off-farm investments.

particular components of current liabilities and liquid assets conflict in any way, of course, with a general assessment of the study period as one in which agriculture tended to receive special consideration, as far as bank lending was concerned, at times when more general policies of credit restriction were being applied.

The complementary trends of an increasing emphasis on short-term borrowing from the clearing banks and a falling level of current bank balances which, in general, are found within the sample are further reflected by the yearly analysis of the number of businesses found to be operating with credit and debit bank balances respectively (set out in Table 22) and of the average level of these balances (shown in Table 23). Certainly these analyses reveal a fairly widespread tendency (despite some fluctuations) for a growing number of the farm businesses in the sample to increasingly employ overdraft facilities, the only really major departure from this trend being discernible in the case of the transfer group where, as the footnote to page 51 points out, rather exceptional circumstances prevailed in the final year of the study. Setting the latter aside, however, the extent of the fall in the total volume of funds held in positive bank balances will be seen from Table 23 to have been insufficient, when related to the fewer farmers with such balances, to prevent an upward trend in the average level of credit balances. On the other hand, as the same table shows, the increase in total in the use of overdraft facilities was sufficiently great not only to produce a notable worsening in the average net bank position for the various groups but also to bring about a fairly general increase in the average level of debit balances even though the total increase in such balances was shared among a growing number of farmers. The nature of these varying trends in the balances held by farmers on bank current accounts at least seem to suggest, therefore, somewhat divergent attitudes to liquidity on the part of individual farmers within the sample.

To the array of tables which follows this section of the report has been added a simplified, diagrammatic presentation of the flow of funds recorded for the sample of 60 farms as a whole for the ten years from 1958/59 to 1967/68. This shows the composition of the main sources of and outlets for the funds flowing through the businesses concerned after annual fluctuations have been smoothed out by the use of three-year moving averages. This manner of presentation has necessitated some amalgamation and netting of source and outlet categories (involving, in particular, the changes which occurred in the physical and financial components within the general field of investment in current working assets) but its adoption at least serves the purpose of making readily apparent the more salient features associated with the funding of these farm businesses.

TABLE 16(a)

SOURCES AND DISPOSALS OF FUNDS

All Farms (60)

1958/59 to 1967/68

<i>Sources</i>	<i>Funds</i>			<i>Disposals</i>	<i>Funds</i>		
	<i>Total</i>	<i>Per farm</i>	<i>Per cent</i>		<i>Total</i>	<i>Per farm</i>	<i>Per cent</i>
	£	£			£	£	
FARM SOURCES				FARM INVESTMENTS			
Farm earnings	1,318,305	21,972	67	Purchase of land and buildings and owner-occupiers' expenditure on improvements	377,664	6,295	19
Sale of land	47,503	792	2	Tenant's improvements	28,444	474	2
Sale of machinery and equipment	93,314	1,555	5	Purchase of machinery and equipment	350,751	5,846	18
Net decrease in valuation	—	—	—	Net increase in valuation	137,016	2,283	7
Net decrease in liquid assets	—	—	—	Net increase in liquid assets	18,869	314	1
Total Funds from Farm Sources	1,459,122	24,319	74	Total Farm Investments	912,744	15,212	47
OTHER SOURCES				NON-FARM ALLOCATIONS			
Capital grants	38,996	650	2	Personal drawings and charges on income	849,404	14,157	43
Funds introduced by farmer	287,681	4,795	15	Transfers to off-farm investments and reserves	196,941	3,282	10
Net increase in long and medium-term loans	76,231	1,270	4	Net decrease in long and medium-term loans	—	—	—
Net increase in current liabilities	97,059	1,617	5	Net decrease in current liabilities	—	—	—
Total Funds from Other Sources	499,967	8,332	26	Total Non-farm Allocations	1,046,345	17,439	53
TOTAL DISPOSABLE FUNDS	1,959,089	32,651	100	TOTAL ALLOCATED FUNDS	1,959,089	32,651	100

TABLE 16(b)

SOURCES AND DISPOSALS OF FUNDS

Wholly and Mainly Owner-occupiers (25)

1958/59 to 1967/68

Sources	Funds			Disposals	Funds		
	Total	Per farm	Per cent		Total	Per farm	Per cent
	£	£			£	£	
FARM SOURCES				FARM INVESTMENTS			
Farm earnings	567,759	22,710	74	Purchase of land and buildings and owner-occupiers' expenditure on improvements	135,695	5,428	17
Sale of land	8,799	352	1	Tenant's improvements	—	—	—
Sale of machinery and equipment	27,712	1,109	4	Purchase of machinery and equipment	123,600	4,944	16
Net decrease in valuation	—	—	—	Net increase in valuation	44,823	1,793	6
Net decrease in liquid assets	—	—	—	Net increase in liquid assets	4,122	165	1
Total Funds from Farm Sources	604,270	24,171	79	Total Farm Investments	308,240	12,330	40
OTHER SOURCES				NON-FARM ALLOCATIONS			
Capital grants	22,191	887	3	Personal drawings and charges on income	353,307	14,132	46
Funds introduced by farmer	119,649	4,786	16	Transfers to off-farm investments and reserves	101,447	4,058	13
Net increase in long and medium-term loans	—	—	—	Net decrease in long and medium-term loans	3,211	128	1
Net increase in current liabilities	20,095	804	2	Net decrease in current liabilities	—	—	—
Total Funds from Other Sources	161,935	6,477	21	Total Non-farm Allocations	457,965	18,318	60
TOTAL DISPOSABLE FUNDS	766,205	30,648	100	TOTAL ALLOCATED FUNDS	766,205	30,648	100

TABLE 16(c)

SOURCES AND DISPOSALS OF FUNDS

Wholly and Mainly Tenants (22)

1958/59 to 1967/68

Sources	Funds			Disposals	Funds		
	Total	Per farm	Per cent		Total	Per farm	Per cent
	£	£			£	£	
FARM SOURCES				FARM INVESTMENTS			
Farm earnings	433,183	19,690	65	Purchase of land and buildings and owner-occupiers' expenditure on improvements	85,335	3,879	13
Sale of land	27,294	1,241	4	Tenant's improvements	22,919	1,042	3
Sale of machinery and equipment	39,638	1,802	6	Purchase of machinery and equipment	149,812	6,810	23
Net decrease in valuation	—	—	—	Net increase in valuation	56,184	2,554	8
Net decrease in liquid assets	—	—	—	Net increase in liquid assets	3,880	176	1
Total Funds from Farm Sources	500,115	22,733	75	Total Farm Investments	318,130	14,461	48
OTHER SOURCES				NON-FARM ALLOCATIONS			
Capital grants	6,255	284	1	Personal drawings and charges on income	281,892	12,813	42
Funds introduced by farmer	76,258	3,466	12	Transfers to off-farm investments and reserves	66,350	3,016	10
Net increase in long and medium-term loans	35,658	1,621	5	Net decrease in long and medium-term loans	—	—	—
Net increase in current liabilities	48,086	2,186	7	Net decrease in current liabilities	—	—	—
Total Funds from Other Sources	166,257	7,557	25	Total Non-farm Allocations	348,242	15,829	52
TOTAL DISPOSABLE FUNDS	666,372	30,290	100	TOTAL ALLOCATED FUNDS	666,372	30,290	100

TABLE 16(d)

SOURCES AND DISPOSALS OF FUNDS

Transfers (13)

1958/59 to 1967/68

Sources	Funds			Disposals	Funds		
	Total	Per farm	Per cent		Total	Per farm	Per cent
	£	£			£	£	
FARM SOURCES				FARM INVESTMENTS			
Farm earnings	317,363	24,413	60	Purchase of land and buildings and owner-occupiers' expenditure on improvements	156,634	12,049	29
Sale of land	11,410	878	2	Tenant's improvements	5,525	425	1
Sale of machinery and equipment	25,964	1,997	5	Purchase of machinery and equipment	77,339	5,949	15
Net decrease in valuation	—	—	—	Net increase in valuation	36,009	2,770	7
Net decrease in liquid assets	—	—	—	Net increase in liquid assets	10,867	836	2
Total Funds from Farm Sources	354,737	27,288	67	Total Farm Investments	286,374	22,029	54
OTHER SOURCES				NON-FARM ALLOCATIONS			
Capital grants	10,550	811	2	Personal drawings and charges on income	214,205	16,477	40
Funds introduced by farmer	91,774	7,060	17	Transfers to off-farm investments and reserves	29,144	2,242	6
Net increase in long and medium-term loans	43,784	3,368	8	Net decrease in long and medium-term loans	—	—	—
Net increase in current liabilities	28,878	2,221	6	Net decrease in current liabilities	—	—	—
Total Funds from Other Sources	174,986	13,460	33	Total Non-farm Allocations	243,349	18,719	46
TOTAL DISPOSABLE FUNDS	529,723	40,748	100	TOTAL ALLOCATED FUNDS	529,723	40,748	100

TABLE 17

ANALYSIS OF GROSS AND NET CAPITAL EXPENDITURE ON IMPROVEMENTS TO LAND AND BUILDINGS BY TYPE OF IMPROVEMENT

All Groups
1958/59 to 1967/68

Type of Improvement	All Farms (60)				Wholly and Mainly Owner-occupiers (25)				Wholly and Mainly Tenants (22)				Transfers (13)			
	Gross Capital Expenditure		Net Capital Expenditure		Gross Capital Expenditure		Net Capital Expenditure		Gross Capital Expenditure		Net Capital Expenditure		Gross Capital Expenditure		Net Capital Expenditure	
	Per farm	Per cent	Per farm	Per cent	Per farm	Per cent	Per farm	Per cent	Per farm	Per cent	Per farm	Per cent	Per farm	Per cent	Per farm	Per cent
	£		£		£		£		£		£		£		£	
OWNER-OCCUPIED LAND																
Land	249	11	167	10	372	10	249	9	87	24	55	21	285	10	200	9
Buildings	1,376	61	1,040	60	2,252	63	1,679	62	131	37	110	41	1,798	62	1,387	61
Services	235	10	174	10	345	10	275	10	91	25	51	19	266	9	184	8
Houses	396	18	350	20	615	17	530	19	50	14	50	19	563	19	514	22
Total	2,256	100	1,731	100	3,584	100	2,733	100	359	100	266	100	2,912	100	2,285	100
TENANTED LAND																
Land	34	7	25	6	—	—	—	—	66	6	58	7	45	11	20	7
Buildings	307	65	262	68	—	—	—	—	709	68	619	70	218	51	162	55
Services	96	20	70	18	—	—	—	—	212	21	151	17	82	19	66	22
Houses	37	8	31	8	—	—	—	—	55	5	55	6	80	19	49	16
Total	474	100	388	100	—	—	—	—	1,042	100	883	100	425	100	297	100
ALL LAND																
Land	283	10	192	9	372	10	249	9	153	11	113	10	330	10	220	8
Buildings	1,683	62	1,302	61	2,252	63	1,679	62	840	60	729	63	2,016	60	1,549	60
Services	331	12	244	12	345	10	275	10	303	22	202	18	348	11	250	10
Houses	433	16	381	18	615	17	530	19	105	7	105	9	643	19	563	22
Total	2,730	100	2,119	100	3,584	100	2,733	100	1,401	100	1,149	100	3,337	100	2,582	100

TABLE 18

ANALYSIS OF GRANTS RECEIVED FOR CAPITAL EXPENDITURE ON IMPROVEMENTS TO LAND AND BUILDINGS BY TYPE OF IMPROVEMENT

All Groups
1958/59 to 1967/68

Type of Improvement	All Farms (60)			Wholly and Mainly Owner-occupiers (25)			Wholly and Mainly Tenants (22)			Transfers (13)		
	Amount per farm	Per cent	Grants as Percentage of Gross Cap. Exp.	Amount per farm	Per cent	Grants as Percentage of Gross Cap. Exp.	Amount per farm	Per cent	Grants as Percentage of Gross Cap. Exp.	Amount per farm	Per cent	Grants as Percentage of Gross Cap. Exp.
OWNER-OCCUPIED LAND	£			£			£			£		
Land	82	16	33	123	15	33	32	34	37	85	14	30
Buildings	336	64	24	573	67	25	21	23	16	411	65	23
Services	61	12	26	70	8	20	40	43	47	82	13	31
Houses	46	8	12	85	10	14	—	—	—	49	8	9
Total	525	100	23	851	100	24	93	100	26	627	100	22
TENANTED LAND												
Land	9	11	26	—	—	—	8	5	12	25	20	56
Buildings	45	52	15	—	—	—	90	57	13	56	44	26
Services	26	30	27	—	—	—	61	38	29	16	12	20
Houses	6	7	16	—	—	—	—	—	—	31	24	39
Total	86	100	18	—	—	—	159	100	15	128	100	30
ALL LAND												
Land	91	15	32	123	15	33	40	16	26	110	15	33
Buildings	381	62	23	573	67	25	111	44	13	467	62	23
Services	87	14	26	70	8	20	101	40	13	98	13	28
Houses	52	9	12	85	10	14	—	—	—	80	10	12
Total	611	100	22	851	100	24	252	100	18	755	100	23

TABLE 19

COMPOSITION OF CHANGES IN VALUATION

All Groups

1957/58 to 1967/68

<i>Valuation Component</i>	<i>All Farms (60)</i>	<i>Wholly and Mainly Owner-occupiers (25)</i>	<i>Wholly and Mainly Tenants (22)</i>	<i>Transfers (13)</i>
Breeding livestock	52	59	51	43
Non-breeding livestock ...	34	28	31	44
Crops	9	10	10	9
Stores	3	3	3	4
Cultivations	2	**	5	—
Total Valuation Change ...	100	100	100	100

** Insignificant

TABLE 20(a)

ANALYSIS OF SOURCES OF FUNDS: NET TOTAL CHANGE IN LONG AND MEDIUM-TERM LOANS

All Groups

1958/59 to 1967/68

Source of Funds	All Farms (60)				Wholly and Mainly Owner-occupiers (25)				Wholly and Mainly Tenants (22)		Transfers (13)	
	Net total change in source				Net total change in source				Net total increase in source		Net total increase in source	
	Increase		Decrease		Increase		Decrease					
	£	%	£	%	£	%	£	%	£	%	£	%
LONG-TERM LOANS												
Institutional:												
A.M.C.	30,516	40	—	—	—	—	—	—	14,534	41	15,982	37
Lands Improvement Company	—	—	—	—	—	—	—	—	—	—	—	—
Insurance companies	1,173	2	—	—	175	5	—	—	998	3	—	—
Building societies	1,900	2	—	—	—	—	—	—	—	—	1,900	4
Sub-total	33,589	44	—	—	175	5	—	—	15,532	44	17,882	41
Other:												
Bank	11,960	16	—	—	2,741	76	—	—	1,000	3	8,219	19
Private: Family	21,710	28	—	—	—	—	1,609	24	16,700	47	6,619	15
Other	8,045	11	—	—	—	—	5,000	73	2,295	6	10,750	24
Local Electricity Board	1,127	1	—	—	682	19	—	—	131	**	314	1
Total Long-term Loans	76,431	100	—	—	3,598	100	6,609	97	35,658	100	43,784	100
MEDIUM-TERM LOANS												
Local authority loan	—	—	200	100	—	—	200	3	—	—	—	—
TOTAL LONG AND MEDIUM-TERM LOANS	76,431	100	200	100	3,598	100	6,809	100	35,658	100	43,784	100

** Insignificant

TABLE 20(b)

ANALYSIS OF SOURCES OF FUNDS: NET TOTAL CHANGE IN CURRENT LIABILITIES

All Groups
1958/59 to 1967/68

Source of Funds	All Farms (60)				Wholly and Mainly Owner-occupiers (25)		Wholly and Mainly Tenants (22)				Transfers (13)			
	Net total change in source				Net total increase in source		Net total change in source				Net total change in source			
	Increase		Decrease				Increase		Decrease		Increase		Decrease	
	£	%	£	%	£	%	£	%	£	%	£	%	£	%
Hire purchase	633	1	—	—	—	—	794	2	—	—	—	—	161	100
Accumulated charges ...	10,619	11	—	—	422	2	9,271	19	—	—	926	3	—	—
Sundry creditors ...	31,040	32	—	—	3,857	19	15,857	32	—	—	11,326	39	—	—
Bank overdrafts ...	55,367	56	—	—	15,816	79	22,764	47	—	—	16,787	58	—	—
Other short-term loans	—	—	600	100	—	—	—	—	600	100	—	—	—	—
TOTAL	97,659	100	600	100	20,095	100	48,686	100	600	100	29,039	100	161	100

Fig. 1

Composition of Flow of Funds According to Nature of Source
Based on Three Year Moving Averages for All Farms (60)
1958/61 to 1965/68.

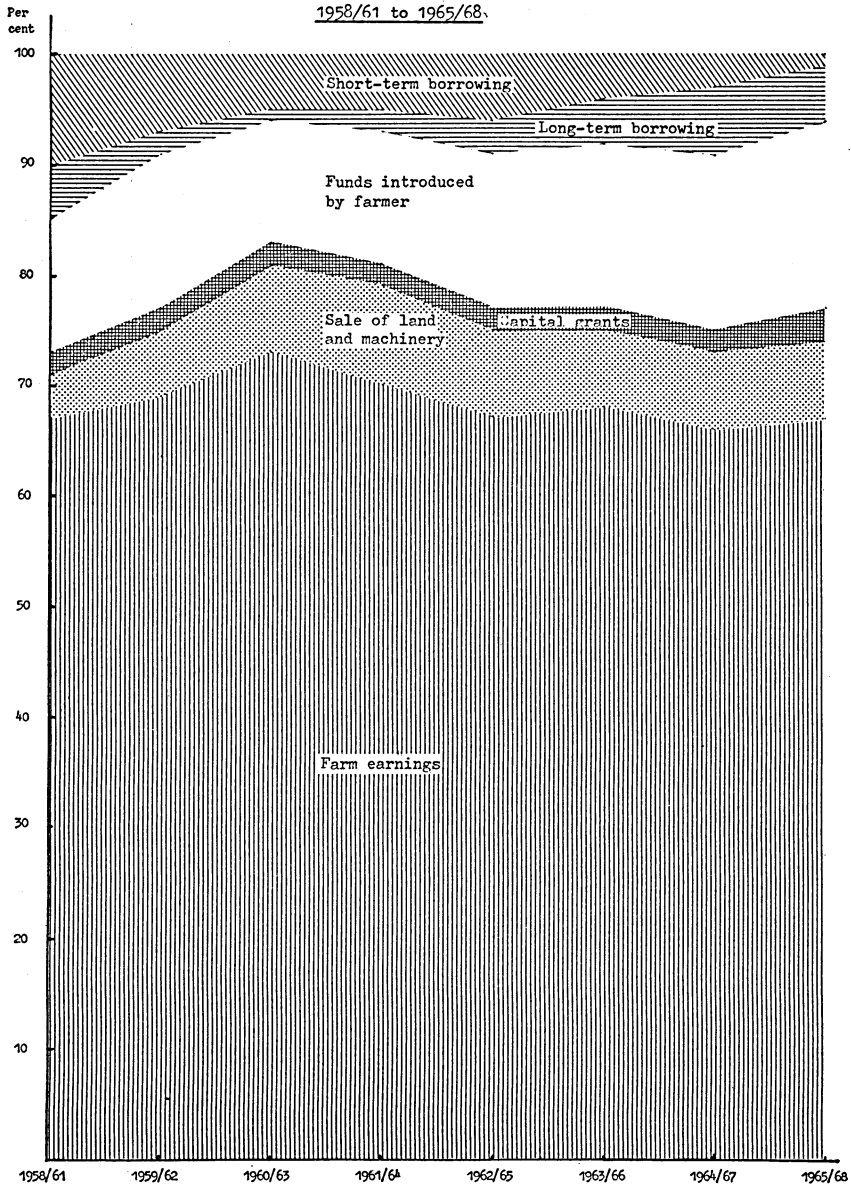


Fig. 2 Composition of Flow of Funds According to Nature of Disposal
Based on Three Year Moving Averages for All Farms (60)
1958/61 to 1965/68

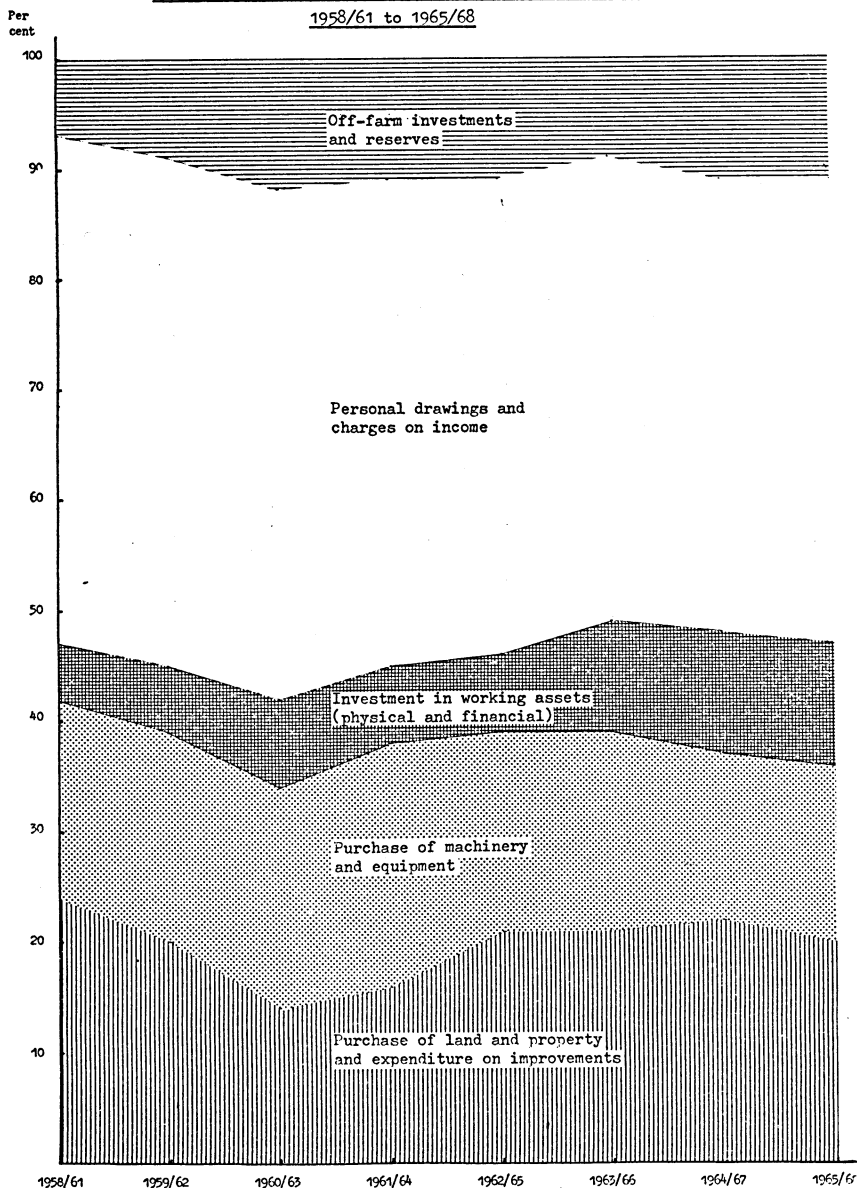


TABLE 21

ANALYSIS OF NET TOTAL INCREASE IN LIQUID ASSETS

All Groups
1958/59 to 1967/68

Nature of Asset	All Farms (60)				Wholly and Mainly Owner- occupiers (25)				Wholly and Mainly Tenants (22)				Transfers (13)	
	Net total change in asset				Net total change in assets				Net total change in asset				Net total in- crease in asset	
	Total amount		Amount per farm		Total amount		Amount per farm		Total amount		Amount per farm		Total amnt.	Amnt. per farm
	Incr.	Decr.	Incr.	Decr.	Incr.	Decr.	Incr.	Decr.	Incr.	Decr.	Incr.	Decr.		
	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Sundry debtors and short-term loans ...	20,867	—	348	—	6,011	—	240	—	9,116	—	414	—	5,740	441
Cash at bank ...	—	1,676	—	28	—	1,871	—	74	—	4,929	—	224	5,124	394
Cash in hand ...	—	322	—	5	—	18	—	1	—	307	—	14	3	**
Net Increase in Liquid Assets ...	18,869	—	315	—	4,122	—	165	—	3,880	—	176	—	10,867	835

** Insignificant

TABLE 22

**NUMBER OF FARM BUSINESSES WITH CREDIT AND DEBIT CURRENT BANK BALANCES BY
TENANCY GROUP**

All Groups
1957/58 to 1967/68

<i>Nature of Bank Balance</i>	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
ALL FARMS (60)											
Credit balance	40	35	30	27	28	28	27	26	28	26	29
Debit balance	20	25	30	33	32	32	33	34	32	34	31
WHOLLY AND MAINLY OWNER- OCCUPIERS (25)											
Credit balance	18	17	15	13	13	14	13	11	12	12	12
Debit balance	7	8	10	12	12	11	12	14	13	13	13
WHOLLY AND MAINLY TENANTS (22)											
Credit balance	14	12	9	9	10	9	10	10	11	10	9
Debit balance	8	10	13	13	12	13	12	12	11	12	13
TRANSFERS (13)											
Credit balance	8	6	6	5	5	5	4	5	5	4	8
Debit balance	5	7	7	8	8	8	9	8	8	9	5

TABLE 23

**AVERAGE LEVEL OF CREDIT AND DEBIT CURRENT BANK BALANCES AND AVERAGE NET BANK
(CURRENT ACCOUNT) POSITION¹ BY TENANCY GROUP**

All Groups
1957/58 to 1967/68

<i>Average Level of Bank Balances</i>	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
	£	£	£	£	£	£	£	£	£	£	£
ALL FARMS (60)											
Average credit balance	788	679	708	999	824	833	979	774	990	718	1,023
Average debit balance	1,200	1,651	2,061	1,765	1,937	2,268	2,253	2,514	2,685	2,496	2,555
Average net bank position	+125	-292	-677	-521	-649	-821	-798	-1,089	-970	-1,103	-826
WHOLLY AND MAINLY OWNER- OCCUPIERS (25)											
Average credit balance	815	566	559	952	807	634	972	910	1,116	897	1,051
Average debit balance	1,166	1,686	2,351	1,514	1,777	1,795	1,677	2,001	1,767	186	1,830
Average net bank position	+260	-154	-605	-232	-433	-435	-300	-720	-383	-534	-447
WHOLLY AND MAINLY TENANTS (22)											
Average credit balance	710	676	896	1,008	731	997	903	684	727	549	556
Average debit balance	1,532	1,156	1,625	1,562	1,648	2,293	2,442	2,201	3,169	2,677	2,694
Average net bank position	-105	-156	-594	-510	-566	-947	-921	-890	-1,221	-1,211	-1,364
TRANSFERS (13)											
Average credit balance	864	1,005	797	1,104	1,053	1,093	1,178	653	1,266	601	1,505
Average debit balance	719	2,318	2,457	2,472	2,611	2,878	2,768	3,883	3,509	3,403	4,076
Average net bank position	+255	-784	-955	-1,096	-1,202	-1,350	-1,549	-2,138	-1,672	-2,171	-642

¹ Net credit balance indicated by positive sign, net debit balance by negative sign.

VI

MOVEMENT OF FUNDS BETWEEN THE FARM AND NON-FARM SECTORS: 1958/59 TO 1967/68

Within the typical forms of farm trading represented by the sole trader or the farming partnership, the business and the private sectors of the family farm's financing arrangements are invariably closely inter-related. Thus, funds for the maintenance of the farmer's family at a socially acceptable standard of living constitute a primary charge on the available funds of the business the level of which will vary both with the general standards prevailing elsewhere in society and with the particular stage reached by the family in its pattern of commitments and responsibilities. Again, funds surplus to current farm business requirements are often transferred to areas of non-farm investment where they may remain only until required for future farm investment purposes or, if they are not so required, where they may accumulate as a reserve against the day of eventual retirement.

In addition, charges which the business must be capable of withstanding if it is to survive will frequently exist in the form of interest which is payable on borrowed funds and tax liability. Although these are not strictly of a private nature, arising as they do in connection with the operation of the actual farm business, they nevertheless represent a transfer of funds out of that business at levels which can be materially affected by family circumstances: either by way of the volume of taxation allowances which those circumstances generate or as a result of the importance which frequently attaches to the family unit as a source of borrowed funds at comparatively low rates of interest.

Certainly the whole area of study which is concerned with this movement of funds between the farming and the private sectors within an unincorporated business structure is one of considerable complexity but an attempt is made in this section to present as complete a picture as possible from the data which were available for the present enquiry. No attempt is made to assess the total volume of non-farming assets held by the sample farmers, only to present an analysis of the nature and extent of those funds which moved across the boundary of farm investment (as defined by the balance sheet listing of farming assets) in order to meet consumption requirements, charges on income, contingency provisions, alternative investment preferences and, as incoming funds, to supplement the existing level of farm investment.

From Table 24(a) it will be seen that on average over the period from 1958/59 to 1967/68, personal drawings accounted for almost exactly one half of the funds directed to areas outside the farm business by the sample as a whole while Tables 24(b) to 24(d) show little variation in this proportion within the three constituent tenancy groups. These tables also show that in no year of the study period did the proportion of total outgoing funds represented by personal drawings fall outside the range of 41-64 per cent for any group. It can be assumed, moreover, that a substantial proportion of the funds expended as wife's wages were utilised to supplement the personal drawings figure. The level of funds allocated to wife's wages—varying only between five and 12 per cent of total drawings

in any year for any group—is of course, in large measure determined by tax considerations, few cases being encountered where the level of wages paid carried the wife into taxable ranges of income.

On average, transfers to off-farm investments and reserves constituted the second largest component of outgoings for the groups of continuing owner-occupiers and tenants but, in the case of the farms which changed their status, both main categories of charges upon income—interest and tax—matched off-farm investment funding in importance. However, on a year-to-year basis the level of such funding varied considerably as the range in its annual contribution to drawings indicates. For this reason the indices which have been constructed as a means of expressing the movement of annual allocations to off-farm investments must be interpreted with considerable caution confined as they are to a comparison with the base year of two subsequent years only. However, an inspection of the source material does at least confirm the presence, in the case of the tenant group, of several years of relatively heavy off-farm investment during the second half of the study period and it is undoubtedly the experience of this group which tends, rather misleadingly, to confer on the sample as a whole the appearance of a rising level of fund transfer to areas of investment outside the farm business.

In general the areas of off-farm investment favoured by the farmers in the sample tended, as Table 25 shows, to be those which continued to offer ready accessibility to funds not currently required in the farm business and which would be regarded as “safe” investments. These include deposit accounts with both the commercial and the Trustee Savings Banks, building society deposit accounts, National Savings Certificates and Government bonded issues, and local authority holdings. Investment in quoted market stocks and shares formed only a small proportion (two to four per cent) of the total movement of investment funds away from the farm business. One special category of investment which figured prominently in the case of the owner-occupier and the tenant groups, however, was that of non-farm property which consisted in a number of cases of the advanced purchase of retirement residences.

The picture presented by all the groups, therefore, is one of considerable and continuing fluctuation in the area of off-farm investment with the index movements between 1962/63 and 1967/68, which are recorded in Tables 24(a) to 24(d), reflecting aspects of the particular years chosen for the construction of the index rather than any clearly discernible trend.

Interest charges also showed considerable variation in the importance with which they featured in the withdrawal of funds from the farm business except in the case of the owner-occupiers where the level of external funding of the business remained comparatively undisturbed either by new borrowing or by substantial repayments. In the case of both the tenants and the transfers the range in the relative importance of interest charges among total drawings stems from a fairly well-defined upward trend in such charges resulting from the increased borrowing which accompanied the trend to increasing land-ownership visible in these two groups.

No comparable trend could be discerned in the case of the incidence of tax liability within the framework of drawings to explain the overall

range in its relative importance. Despite the increase in the level of average money incomes which occurred in all groups which might have lead one to expect an overall increase in the incidence of tax the relative importance of tax payments as an item of drawings fluctuated markedly between the extremes indicated in Tables 24(a) to 24(d) over the ten-year series of figures. Clearly, among the factors which must be held accountable for this are fluctuating annual farm incomes, changing rates of tax and capital allowances, changing personal and family circumstances which would modify total personal allowance qualifications and occasional adjustments under tax review procedures. All of these, to some degree, would tend to obscure any trend which might be present due to rising incomes.

Finally, withdrawals in the form of life assurance premiums formed a small but fairly consistent part of drawings varying from about three to ten per cent of the total.

The broad analysis of the sources and disposals of funds presented in the previous section indicated that, in the various sample groups, between 12 and 17 per cent of the total additional funds which became available to the aggregated farm businesses during the period from 1958/59 to 1967/68 took the form of funds introduced by the proprietors of those businesses. A more detailed analysis of the composition of these extraneously-derived funds is now set out in Table 26 indicating that, over the period, interest and withdrawals from private bank and building society accounts (including Post Office and Trustee Savings Bank accounts) and gifts of money (principally from relatives) were generally the two most important sources of these funds from the private sector except in the case of the transfer farms where legacies were the most important single source of funds as a result of the inclusion, under this heading, of the value of settled property. The sale of Government stocks and local authority holdings, together with interest from such assets, was also a relatively important source of funds in the case of the tenants and the transfer farms as was the interest and repayments in respect of a number of personal loans made by tenants but, apart from these, the various other sources of private funds quoted were, individually, only minor contributors to the total flow of funds from the farmers' off-farm reserves.

This analysis of the sources of the private funds received during the ten-year period conceals the very variable and sometimes intermittent nature of those funds, even in the case of the more important contributing sources. This characteristic is better portrayed by the consolidated analysis of Tables 27(a) to 27(d) which illustrates the extent of the deviation from the average annual funding evidenced by the four main "source" categories over the study period. Thus, funds which derive from holdings which represent a preference on the part of the farmers concerned for investment opportunities outside the farm business accounted for as much as 95 per cent (in the case of the tenants) and as little as 21 per cent (in the case of the transfers) of all incoming funds. Again, funds from non-farm property—which have been listed separately from off-farm financial investments in view of the fact that such assets arise in a significant number of cases from inheritance and from the purchase of residences in anticipation of eventual retirement—ranged in importance in any one year from 50 per cent of the total privately-introduced funds (for the tenants) to an insignificant amount (for both the tenants and the transfers). Similarly, legacies and gifts, which obviously represent a fortuitous source of funds, assumed for

the transfers, in one year, a peak importance among funds introduced of 77 per cent while, for the tenants, the contribution to the annual inflow of private funds in another year barely amounted to one per cent.

The framework, thus far described, for classifying the funds moving into and out of the farm business via the proprietor was specifically designed to bring into relationship, at a subsequent stage, the opposing movements of those funds which represent a build-up and a depletion respectively of off-farm capital assets, both financial and physical (the latter in the form of property). In this way, the *net* movement of such funds can be established for comparison with the other flows of funds to or from the farm during the study period which, in contrast, represent receipts or expenses of a current nature: income in the form of interest or rent from off-farm investments or reserves; windfall receipts; current consumption in the form of personal drawings; and annual charges on income.

This assessment of the net flow of capital funds to or from non-farm sectors of investment and its relative importance compared with other flows, is shown in Table 28 together with the measurement of the overall net withdrawals from the farm business. The contrasting experience of the three tenancy groups—particularly between the transfer group on the one hand and the owner-occupiers and tenants on the other—again demonstrates the dangers inherent in confining one's attention to the results for the sample as a whole: for the owner-occupiers and the tenants a net outflow of funds to off-farm areas of investment and into non-farm property is visible, together amounting to eight to ten per cent of total net outflows but for the transfers, presumably faced in a significant number of cases with the need to muster funds with which to purchase their farms, a net flow in the reverse direction is apparent from off-farm investment and property which amounted to ten per cent of total net inflows to the farm business.

These respective movements of investment funds are reflected in the volume of the flows of income from off-farm investments (as interest from financial investments and as rent from property) for the three tenancy groups. This amounted to 30 per cent of the net inflows in the case of the owner-occupiers, 13 per cent for the tenants but only six per cent for the transfers. Legacies and gifts, however, together formed the largest single component of net inflows in all groups, ranging from 45 per cent for the owner-occupiers to 79 per cent for the transfers, the size of the latter figure being clearly influenced by the inclusion in it of the value of inherited farms.

Expressed as a proportion of *net* outflow rather than as a proportion of total allocated funds, personal drawings and wife's wages (which were used in large measure to supplement family living expenditure) assume an even greater prominence and withdrawals for these purposes amounted to a consistent 67-71 per cent of total net outflows for the three tenancy groups. Charges on income, in the form of loan interest and tax payments, were also an important drain on the funds available to the farm business amounting, in the case of the transfer group with its record of greater reliance on external sources of funds, to 29 per cent of total net outflows. The net outflow of funds in the form of life assurance premiums comprised a small but consistent proportion (three to five per cent) of drawings.

In total, and in round figures, it will be noted that overall net withdrawals from the businesses included in this particular sample amounted, on average, to about £1,200 per farm per annum for the tenants and transfers and about £1,300 for the owner-occupiers.

TABLE 24(a)

ANALYSIS OF DRAWINGS

All Farms (60)

1958/59 to 1967/68

Nature of Drawings	Average Yearly Drawings		Range in Yearly Drawings				Index of Yearly Drawings (1958/59=100)	
			Max.	Min.	Max.	Min.	1962/63	1967/68
Interest charges	£ 8,107	% 8	£ 13,237	£ 3,363	% 10	% 4	206	394
Tax payments	9,805	9	14,105	7,600	17	6	55	93
Life assurance premiums	5,152	5	6,031	3,973	6	4	127	152
Personal drawings	53,214	51	63,033	43,609	60	46	114	145
Wife's wages	8,662	8	9,963	7,687	10	7	100	128
Off-farm investments:								
Financial holdings	16,749	16	31,105	8,055	29	9	243	173
Non-farm property	2,945	3	14,246	—	12	—	—	—
Total Drawings	104,634	100	135,484	85,559	—	—	127	158

TABLE 24(b)

ANALYSIS OF DRAWINGS

Wholly and Mainly Owner-occupiers (25)

1958/59 to 1967/68

Nature of Drawings	Average Yearly Drawings		Range in Yearly Drawings				Index of Yearly Drawings (1958/59=100)	
			Max.	Min.	Max.	Min.	1962/63	1967/68
Interest charges	£ 2,758	% 6	£ 3,374	£ 1,875	% 7	% 5	144	165
Tax payments	4,336	9	5,471	3,208	12	6	101	128
Life assurance premiums	2,290	5	2,522	2,101	6	4	108	113
Personal drawings	22,409	49	26,845	18,077	59	43	110	147
Wife's wages	3,537	8	4,261	3,035	9	7	97	135
Off-farm investments:								
Financial holdings	8,508	19	15,169	1,004	31	3	221	229
Non-farm property	1,637	4	9,361	—	18	—	—	—
Total Drawings	45,475	100	36,096	56,966	—	—	130	158

TABLE 24(c)

ANALYSIS OF DRAWINGS
Wholly and Mainly Tenants (22)
1958/59 to 1967/68

Nature of Drawings	Average Yearly Drawings		Range in Yearly Drawings				Index of Yearly Drawings (1958/59=100)	
			Max.	Min.	Max.	Min.	1962/63	1967/68
Interest charges	£ 2,623	% 8	£ 5,286	£ 928	% 12	% 3	209	570
Tax payments	2,123	6	3,819	1,465	14	4	38	57
Life assurance premiums	1,886	5	2,159	1,269	10	4	149	158
Personal drawings	18,242	52	21,571	15,578	64	44	110	133
Wife's wages	3,315	10	3,942	2,580	12	8	115	145
Off-farm investments:								
Financial holdings	5,326	15	13,966	1,517	35	5	596	248
Non-farm property	1,309	4	8,039	—	17	—	—	—
Total Drawings	34,824	100	48,790	24,836	—	—	147	179

TABLE 24(d)

ANALYSIS OF DRAWINGS
Transfers (13)
1958/59 to 1967/68

Nature of Drawings	Average Yearly Drawings		Range in Yearly Drawings				Index of Yearly Drawings (1958/59=100)	
			Max.	Min.	Max.	Min.	1962/63	1967/68
Interest charges	£ 2,725	% 11	£ 4,864	£ 560	% 16	% 3	409	869
Tax payments	3,345	14	6,001	2,011	27	9	34	90
Life assurance premiums	976	4	1,613	580	5	3	148	278
Personal drawings	12,563	52	15,264	9,313	58	41	129	159
Wife's wages	1,811	7	2,054	1,594	10	5	85	95
Off-farm investments:								
Financial holdings	2,915	12	6,300	1,202	27	4	65	31
Non-farm property	—	—	—	—	—	—	—	—
Total Drawings	24,335	100	30,068	19,978	—	—	96	134

TABLE 25

ANALYSIS OF AMOUNTS TRANSFERRED TO OFF-FARM INVESTMENTS AND RESERVES

All Groups

1958/59 to 1967/68

<i>Nature of Investment</i>	<i>All Farms (60)</i>		<i>Wholly and Mainly Owner-occupiers (25)</i>		<i>Wholly and Mainly Tenants (22)</i>		<i>Transfers (13)</i>	
	£	%	£	%	£	%	£	%
Bank deposit/P.O.S.B./T.S.B. accounts ...	40,528	21	24,107	24	7,401	11	9,020	31
Building society accounts	53,515	27	40,471	40	9,917	15	3,127	11
National Savings Certificates/Development Bonds/Premium Bonds	10,965	6	2,514	2	5,048	8	3,403	12
Other Government/Local authority holdings	9,702	5	1,000	1	6,700	10	2,002	7
Industrial and commercial stocks and shares	6,415	3	4,409	4	1,397	2	609	2
Co-operative shares and loans	10,255	5	7,778	8	678	1	1,799	6
Personal loans	17,894	9	1,993	2	11,125	17	4,776	16
Non-farm property	29,452	15	16,366	16	13,086	20	—	—
Other investments	18,215	9	2,809	3	10,998	16	4,408	15
Total Investments	196,941	100	101,447	100	66,350	100	29,144	100

TABLE 26

ANALYSIS OF SOURCES OF FUNDS INTRODUCED

All Groups

1958/59 to 1967/68

Source of Funds Introduced	All Farms (60)		Wholly and Mainly Owner-occupiers (25)		Wholly and Mainly Tenants (22)		Transfers (13)	
	£	%	£	%	£	%	£	%
Banks and building societies	84,008	29	49,718	41	15,074	20	19,216	21
Government and local authority holdings ...	24,851	9	6,220	5	8,825	12	9,806	11
Industrial and commercial shares	8,305	3	3,460	3	4,643	6	202	**
Co-operative shares and accounts	5,232	2	4,404	4	411	1	417	**
Personal loan interest and repayments ...	17,659	6	3,006	3	10,772	14	3,881	4
Income tax repayments	2,966	1	1,813	2	719	1	434	1
Insurances, benefits and other compensation	3,594	1	1,693	1	963	1	938	1
Legacies	38,430	13	5,264	4	4,472	6	28,694	31
Matured and surrendered life assurances ...	10,851	4	2,458	2	4,172	5	4,221	5
Sale of non-farm property	14,408	5	6,883	6	4,779	6	2,746	3
Rents from non-farm property	10,065	4	7,778	6	343	**	1,944	2
Receipts from paying guests	6,485	2	4,967	4	420	1	1,098	1
Loans in respect of non-farming investments	6,500	2	—	—	6,500	8	—	—
Gifts of money	49,089	17	17,709	15	13,679	18	17,701	19
Other sundry private receipts and funds introduced	5,238	2	4,276	4	486	1	476	1
Total Funds Introduced	287,681	100	119,649	100	76,258	100	91,774	100

** Insignificant

TABLE 27(a)

ANALYSIS OF FUNDS INTRODUCED
All Farms (60)
1958/59 to 1967/68

Nature of Funds Introduced	Average Yearly Funding		Range in Yearly Funding				Index of Funding (1958/59=100)	
			Max.	Min.	Max.	Min.	1962/63	1967/68
	£	%	£	£	%	%		
Off-farm investments and reserves ¹	15,091	52	25,572	8,121	76	33	180	260
Funds from non-farm property ²	2,447	9	6,991	384	27	1	36	63
Legacies and gifts of money	8,752	30	22,127	900	64	7	624	1,784
All other sources	2,478	9	12,852	600	20	2	254	2,142
Total Funds Introduced	28,768	100	52,231	13,116	—	—	175	398

1 Includes both interest and capital withdrawals from off-farm investments and reserves.

2 Includes both rent from and sales of non-farm property.

TABLE 27(b)

ANALYSIS OF FUNDS INTRODUCED
Wholly and Mainly Owner-occupiers (25)
1958/59 to 1967/68

Nature of Funds Introduced	Average Yearly Funding		Range in Yearly Funding				Index of Funding (1958/59=100)	
			Max.	Min.	Max.	Min.	1962/63	1967/68
	£	%	£	£	%	%		
Off-farm investments and reserves ¹	6,927	58	11,128	807	76	29	294	294
Funds from non-farm property ²	1,466	12	6,496	250	31	5	425	545
Legacies and gifts of money	2,297	19	6,307	480	30	6	824	1,314
All other sources	1,275	11	2,971	362	36	5	269	726
Total Funds Introduced	11,965	100	21,180	2,783	—	—	352	450

1 Includes both interest and capital withdrawals from off-farm investments and reserves.

2 Includes both rent from and sales of non-farm property.

TABLE 27(c)

ANALYSIS OF FUNDS INTRODUCED
Wholly and Mainly Tenants (22)
1958/59 to 1967/68

Nature of Funds Introduced	Average Yearly Funding		Range in Yearly Funding				Index of Funding (1958/59=100)	
			Max.	Min.	Max.	Min.	1962/63	1967/68
	£	%	£	£	%	%		
Off-farm investments and reserves ¹	4,390	57	10,357	1,106	95	25	92	197
Funds from non-farm property ²	512	7	3,216	10	50	**	1	10
Legacies and gifts of money	1,815	24	10,397	80	58	1	200	10,397
All other sources	909	12	6,793	91	29	2	189	6,012
Total Funds Introduced	7,626	100	23,413	1,673	—	—	50	364

** Insignificant

1 Includes both interest and capital withdrawals from off-farm investments and reserves.

2 Includes both rent from and sales of non-farm property.

TABLE 27(d)

ANALYSIS OF FUNDS INTRODUCED
Transfers (13)
1958/59 to 1967/68

Nature of Funds Introduced	Average Yearly Funding		Range in Yearly Funding				Index of Funding (1958/59=100)	
			Max.	Min.	Max.	Min.	1962/63	1967/68
	£	%	£	£	%	%		
Off-farm investments and reserves ¹	3,774	41	6,186	1,010	80	21	90	305
Funds from non-farm property ²	469	5	1,800	15	21	**	567	2,847
Legacies and gifts of money	4,639	51	18,713	320	77	4	458	548
All other sources	295	3	688	—	19	—	265	882
Total Funds Introduced	9,177	100	24,442	1,978	—	—	160	386

** Insignificant

1 Includes both interest and capital withdrawals from off-farm investments and reserves.

2 Includes both rent from and sales of non-farm property.

TABLE 28

ANALYSIS OF NET MOVEMENT OF FUNDS TO AND FROM THE NON-FARM SECTOR

All Groups

1958/59 to 1967/68

Nature of Funds	All Farms (60)			Wholly and Mainly Owner-occupiers (25)			Wholly and Mainly Tenants (22)			Transfers (13)		
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent
	£	£		£	£		£	£		£	£	
Net outflow to off-farm investments	40,412	673	4	25,884	1,035	7	17,267	785	5	—	—	—
Net purchase of non-farm property	15,044	251	2	9,483	379	3	8,307	378	3	—	—	—
Charges on income	179,115	2,985	20	70,945	2,838	18	47,467	2,158	16	60,703	4,669	29
Net outflow of life assurance funds	40,671	678	5	20,443	818	5	14,687	667	5	5,541	426	3
Personal drawings and wife's wages	618,767	10,313	69	259,461	10,378	67	215,566	9,798	71	143,740	11,057	68
Total Net Outflows	894,009	14,900	100	386,216	15,448	100	303,294	13,786	100	209,984	16,152	100
Net inflow from off-farm investments	—	—	—	—	—	—	—	—	—	2,739	211	5
Net sale of non-farm property ...	—	—	—	—	—	—	—	—	—	2,746	211	5
Interest from off-farm investments	12,978	216	10	7,611	304	15	3,728	169	12	1,639	126	3
Rents from non-farm property ...	10,065	168	7	7,778	311	15	343	16	1	1,944	149	3
Legacies and gifts of money ...	87,519	1,459	65	22,973	919	45	18,151	825	58	46,395	3,569	79
Other funds introduced	24,783	413	18	12,749	510	25	9,088	413	29	2,946	227	5
Total Net Inflows	135,345	2,256	100	51,111	2,044	100	31,310	1,423	100	58,409	4,493	100
NET WITHDRAWALS	758,664	12,644	—	335,105	13,404	—	271,984	12,363	—	151,575	11,659	—

VII

SOME SELECTED FINANCIAL RATIOS 1957/58 TO 1967/68

Section II of this report dealt briefly with the essential characteristics of a balance sheet and of its main components. The main function of the document, it was stated, is to record, on the one hand, the manner in which the funds available to the business are held as assets and, on the other, the nature of the sources from which those funds have been obtained, such sources representing the liabilities of the business which will ultimately have to be discharged. The distinguishing yardstick to be used in the case of both assets and liabilities is that of time: in other words, the measure of permanence attaching to the various categories of assets and liabilities in their current balance sheet listed form. Thus, assets will vary in the speed with which they will normally be transformed into cash in the course of the production process or in the ease with which their value can be realised in the event of the more drastic circumstances of liquidation. Liabilities, on the other hand, will vary, to the extent that they represent claims against the business, according to the period within which they are likely to be presented and have to be eventually met.

It follows, therefore, that the relationships which exist between broad categories of assets and broad categories of liabilities can be of crucial importance to the health and, indeed, to the survival of the business and have, for that reason, important implications for the financial aspects of management. As an example, it will be clearly undesirable for the fixed assets of a business, which must be at least maintained if the production potential of the business is not to suffer, to be financed by short-term funds which might be withdrawn at short notice. Moreover, even if fixed assets are adequately covered by long-term funds it will be inadvisable to allow current liabilities to exceed the more liquid elements of current assets, except perhaps as a temporary expedient, as such a situation may easily result in the need to prematurely dispose of physical working assets with its consequent impairment of profit margins.

As an aid to the study of the various relationships within the framework of the financial structure of the farm business a whole range of convenient ratios, devised for general financial management purposes, are available to the farm economic analyst and a selection of these has been employed in connection with the present study in order to investigate the possible existence of broad trends at the group level.

The ratios chosen fall broadly into two groups. First, there are those concerned with relationships within the asset and liability structures respectively and which have, therefore, been collectively termed "structural ratios"; secondly, there are the ratios which depict the amount of cover provided by the assets of the business to meet the claims on that business by those supplying funds to it and which are alternatively described as "credit ratios" or—perhaps more descriptively—as "safety ratios".

The structural ratios which have been computed for the three sample sub-groups distinguished for the present study are set out in Tables 29(a) and 29(b) together with ratios for the group as a whole, although the usefulness of the latter must be seen as strictly limited. For the most part,

the nature of these ratios is self-explanatory; in their scope, moreover, they partly cover ground already explored in Sections III and IV of this report although the reduction of the balance sheet material to its skeletal form at least permits the presentation at this stage of a complete series of annual ratios for the decade of the survey. For these reasons, therefore, comment on these structural ratios will be brief.

First, Table 29(a) serves to re-emphasize the growth in the relative importance of fixed assets at the expense of physical and liquid working assets in all groups although the trend was especially pronounced in the case of the transfer group of farms where the asset ratios clearly reflect the transition from tenant status to owner-occupation. The fact that the tenant group shared in the growing relative importance of fixed to total assets to the extent which they did is, of course, attributable to the considerable amount of land and property purchases in which this group engaged without losing their essential tenant character, coupled with substantial investment in machinery and breeding livestock. In all groups, the "stepping" effect of the revaluation of land and property in 1962/63 and again in 1967/68 is discernible.

In Table 29(b) the trends in the liability-based ratios for each of the three tenancy groups display interesting variation. In the case of the owner-occupiers the relative importance of net worth increased as the relative importance of long and medium-term loans declined with the repayment of loans while the contribution of short-term borrowed funds (current liabilities) to the overall supply of funds to the group business, if showing some annual variation, remained broadly the same except for the last year of the study period. In the case of both the tenant and transfer groups, however, the tendency for growing recourse to be made to long-term external sources for the funding of additional long-term assets is clearly revealed together with the tendency for equity to decline in consequence.

All the trends depicted are affected to a greater or lesser extent by any increase accruing to net worth on the revaluation of land and buildings in 1962/63 and 1967/68 and this effect, in part at least, will be responsible, in the case of the transfer farms, for the lessening relative importance of short-term borrowing in the latter part of the study period. When this effect is discounted, however, the group would appear to exhibit a more stable proportional contribution from short-term sources (apart from two deviating years which reflect rather special circumstances in the financial arrangements of a small number of farms) than was present in the case of the tenants. This may have been due to the better record of the transfer farms as far as growth in farm income was concerned which would permit a greater measure of short-term asset funding from internal sources after the charges imposed by long-term borrowing and private drawing requirements of the farmers had been met.

Although the structural ratios described above provide important information regarding the financial framework of the farms concerned it is in the cross-relationships between various components of assets and those of liabilities that the strengths or weaknesses of the farm businesses are more fully revealed. Of course, one of the structural ratios already presented—net worth as a percentage of total liabilities—serves also as a "safety ratio" inasmuch as total liabilities will always equal total assets

and net worth expressed as a percentage of total assets will indicate the amount which would remain to the owners of the business in the event of liquidation at the depicted "book" values of the listed assets. However, a number of other ratios are available which assist in the assessment of the security of either an individual business or a group of businesses viewed as an entity. Five of these have been selected for inclusion in this report and the nature of each will be briefly described before it is given numerical expression in terms of the present sample.

The first of these ratios, TOTAL ASSETS TO TOTAL EXTERNAL LIABILITIES, has close affinities with the structural ratio which expresses net worth as a percentage of either total assets or liabilities but offers a more convenient means of assessing the adequacy of overall cover provided by the assets of the business should the latter be faced with the discharge of all its external financial obligations. Thus, it enables one to state, where the ratio of total assets to total external liabilities is, for example, 5.0:1, that the present book values of the listed assets would have to decline by four-fifths before their value was exceeded by the volume of external debts.

Examination of the contents of Table 30 shows that, in the case of the owner-occupiers, increasing land values and a diminishing long-term debt burden resulted in an overall improvement in the ratio of total assets to total external liabilities from 5.7:1 to 10.4:1 whereas, for the tenants, a much more modest revaluation effect, coupled with an increasing measure of long-term debt, had the effect of narrowing the ratio of total assets to total external liabilities from 4.9:1 to 2.9:1. The more pronounced revaluation effect which operated within the transfer group, partly offsetting the effect of a rising level of long-term borrowing as loans and mortgages were raised to finance the purchase of farms, produced an overall fall in the ratio of total assets to total external liabilities from 6.9:1 to 5.3:1. This overall fall, however, fails to reveal the stepped profile of the decline with its interim peak ratio of 4.5:1, recorded for 1962/63 when a revaluation of land was undertaken.

The second ratio to be discussed is that of CURRENT ASSETS TO CURRENT LIABILITIES, often referred to quite simply as the "current ratio" or the "quick ratio". This ratio is concerned with the safety of the business in the shorter term: with its ability to withstand any sudden demand from its short-term creditors without prejudice to its longer term position. It measures, in other words, the availability of cash and near-cash assets to meet these pending obligations.

Despite a certain amount of annual variation the figures in Table 30 do seem to offer some evidence of a contraction of the ratio of current assets to current liabilities over the ten-year period—particularly during the first half of that period—for both the tenant and the transfer groups if one disregards the unusual circumstances surrounding the rather sudden widening of the ratio in the final year of the period in the case of the transfer farms.¹ By comparison, however, the owner-occupiers, while sharing in the apparent narrowing of the ratio of current assets to current liabilities which affected the other tenancy groups in the early part of the study period, proceeded to exhibit a measure of recovery in the strength of this particular ratio during the latter part of the period.

¹ These circumstances have already been referred to in the footnote to page 51.

The ratio of current assets to current liabilities serves also as a guide to the trend in WORKING CAPITAL, the latter being customarily defined as the *difference* between current assets and current liabilities. It represents the uncommitted short-term financial resources available to the farmer in the succeeding production period.

Apart from the trends in the current ratio revealed by an inspection of the contents of Table 30 its absolute level in many of the years of the study period must also give considerable cause for concern, particularly in the case of the tenant and transfer groups. It is difficult, of course, to say with any precision what this ratio should desirably be as the length of the production cycle—and consequently the speed with which resources, often obtained on credit, are turned into cash—will vary. But in circumstances like those in farming, where a substantial proportion of current assets is comprised of immature products, a current ratio of 1:1 in some years and only a little over in many others would seem to bear some investigation as it would suggest a situation where liquid assets—cash and near-cash assets which are immediately or imminently available to meet short-term claims—amount to less than the sum of those claims. This means that, if the latter were pressed, immature products might have to be disposed of at the risk of losses being incurred on them.

It is for this reason that any consideration of the current ratio and its trends should be accompanied by a scrutiny of the “liquidity ratio”: that is, the RATIO OF LIQUID ASSETS TO CURRENT LIABILITIES. It would seem reasonable to assume that this ratio should not remain for any length of time below a 1:1 level unless very good reasons can be advanced to warrant such a situation. The kind of justifying circumstances which might be envisaged are where overdraft facilities have been provided for a period of time in connection with an investment or expansion programme; but an inspection of the trend in the ratio would nevertheless be advisable in the expectation of a gradual improvement in the ratio over time. Again, an apparently persistent unfavourable liquidity ratio may arise as a result of circumstances peculiar to the date at which the balance sheet is normally struck and record a transitory situation which will predictably improve within a short space of time. The possible existence of such qualifying factors clearly points to the advisability of considering all aspects of the construction of the ratio concerned before any pronouncements upon it are made.

Table 30 shows that, apart from the first year of the study period in the case of the transfer farms, the ratio of liquid assets to current liabilities for each of the three identified sub-groups remained below unity throughout the study period, displaying a tendency to widen adversely in the early years but then becoming rather more stable over the remainder of the period. The traditional reliance of the small family-farmer on short-term bank lending for the funding of his seasonal or cyclical farm operations and the official recognition of this dependence which is reflected by the favoured position accorded agriculture during a succession of Governmental credit restrictions must be seen as accounting, in large part, for the general level of this ratio; but its adverse movement in the early years of the study period would seem to be attributable to the granting of substantial overdraft facilities to a number of farmers for longer term farm investment purposes. As a policy the provision of such

facilities has been largely discontinued by the commercial banks but the effects of this earlier phase in bank lending is discernible in subsequent ratios in the series.

It would seem, therefore, that slender, or even ostensibly precarious, liquidity ratios have tended to become, for special reasons, a persisting feature of the financing of many farms. It should be recognized, however, that there are inherent dangers in the too complacent acceptance of such a situation and the effects of a sudden change in central credit policy or the over-reaching of existing overdraft limits in meeting the claims of suppliers even less favourably placed as far as available credit facilities are concerned, may bring serious consequences in their train as the experience of recent years has indeed demonstrated. At the very least such a situation must inevitably operate as a marked inhibiting factor on any plans for the expansion of the farm's production.

The two remaining ratios presented in Table 30—the ratio of NET WORTH TO CURRENT LIABILITIES and that of NET WORTH TO LONG-TERM DEBT CAPITAL—tend to complement certain of the structural percentages found in Table 29(a) and also the ratio of total assets to total external liabilities already described; but the form in which they appear in Table 30 does enable them to convey immediately the amount of cover available to lenders to the business of short and long-term funds respectively. Quite clearly these two ratios, which should always be examined jointly, will be of primary importance to anyone contemplating the extension of further credit to the business.

The figures relating to these two ratios in Table 30 show the underlying increase in land values and the repayment of long-term debt again operating in the case of the owner-occupiers to provide a greater measure of cover to all remaining creditors of the businesses. In the case of the tenants, however, where the cushioning effect of land values (though present to a degree) is much less pronounced, the amount of cover available to both short and long-term lenders shows a marked fall although the relationship between net worth and the volume of short-term credit shows evidence of a more favourable turn in the latter part of the study period.

The ratio of net worth to debt capital fell drastically within the group of transfer farms in the second year of the period when a proportionately large amount of land purchase was undertaken with the aid of loans and mortgages; but, thereafter, it fluctuated at this lower level, as the opposing effects of increasing land values and the extended use of long-term credit facilities resolved themselves within the group. For the same group, the ratio of net worth to current liabilities also fell in the second year due to the extensive use, in the case of one farm, of bank overdraft facilities for land purchase but this was followed by an overall widening of the ratio associated in large measure with the increase in net worth resulting from land revaluation in 1962/63 and 1967/68.

The recording of the ratio of debt capital to net worth has a particularly important application in business analysis as it indicates, for an individual business or for a group of businesses, the level of what is generally referred to as "gearing"—the relationship which long-term borrowed funds bears to the owner's capital stake in the business. This

measure is of crucial importance, in association with the overall level of return on capital employed in the business and the cost of external capital, in eventually determining the rate of return on the farmer's own invested capital.

A business with a wide ratio of external debt capital to net worth is said to be highly geared; one with few borrowed funds, low geared; and a business without any borrowed long-term capital, to have no gearing.

The significance of the gearing ratio lies in the fact that where the rate of return on all capital employed in the business is in excess of the cost of long-term borrowed capital (its rate of interest) then the surplus earned by the borrowed element will accrue to the owner's capital (net worth) and the higher the level of gearing the greater will be the benefit accruing in this manner. Conversely, where the rate of return on all capital is less than the rate of interest on borrowed capital then the shortfall between the cost and the earnings of borrowed capital will be made good at the expense of any residual return to the owner's capital. In the latter circumstances, the higher the gearing the greater will be the reduction in the rate of return to his own invested capital suffered by the owner.

This effect of gearing, which gives practical expression to "the principle of increasing risk"¹, is of particular significance for agriculture with its characteristic of fluctuating incomes, and a widespread, if rather vague, recognition of its implications is sometimes postulated as a possible factor in explaining the generally low level of gearing which has for long been found in the industry. Certainly, for those farm businesses which do not conform to the general pattern and which employ a high level of gearing, all too often with only a modest production record, even a short period of relatively lean profit years may result in crippling deprecations to the assets of the farm business and an erosion of the farmer's own capital. This is particularly true in a situation where high interest rates on borrowed capital dictate the maintenance of correspondingly higher overall rates of return on capital employed if the business is to prosper. Where a condition of low liquidity is prevalent, of course, even farms with only modest levels of gearing may find themselves faced with an almost immediate funding crisis in the event of a sudden fall in income.

The final part of this section describes the attempt which has been made in the present study to measure one other important ratio: the rate of return obtained on capital employed. However, this customary reference to a single ratio is rather confusing as the study of financial relationships within this particular area involves the use of not one but a small family of ratios which relates appropriate measures of return to the several distinguishable categories of capital. Each of these ratios will be briefly described in turn but it should be noted at this point that all of them are concerned only with the provision of some *overall* measure of the return obtained from the productive processes of farming in relation to the amount of capital employed; they do not, in the terms in which they are defined for the purpose of this study, attempt to measure the return to

¹ For a brief demonstration of the operation of this principle the reader is referred to Appendix E, Table v.

capital *per se*. In other words, no attempt has been made to apportion the profit earned by the farmer, in his capacity as a sole trader or a partner, into its constituent parts which more specifically represent rewards to him for his manual contribution, for his management function, and as an investor of funds in his own business. It will clearly be necessary to make such an apportionment to permit any valid comparison of the rate of return on capital in agriculture with that in other industries or with expected rates of interest in alternative investment outlets; but to do this would, it is felt, add unduly to the length of this report and attention is, therefore, directed mainly to *trends* in the rates of return in the compilation of which overall return, as measured by an appropriate concept of profit, serves as an adequate index. These rates may, however, serve as a rough guide to the adequacy or otherwise of the return to capital alone, if not too unrealistic returns are arbitrarily assigned to the farmer's manual labour and management functions.

In commenting upon the ratios set out in Tables 31(a) to 31(e) it is perhaps pertinent to remind the reader of the twofold nature of business capital which manifests itself in the format of the balance sheet where such capital is listed both in its committed form as business assets and in terms of its derivation as denoted by the liability structure. Having said this, attention can more profitably be turned to the first two measures to be considered, in Table 31(a), which relate profit to total capital employed in the business *as assets*. These measures are of primary importance since they provide a record of the trend in the economic fortunes which have attended the businessman's use of available capital in its currently committed form.¹

The first of them relates profit²—before the deduction of interest charges on borrowed capital and of tax but after deduction of depreciation charges—to total assets, including both landlord's and tenant's assets as these are traditionally distinguished. This particular ratio is presented first in Table 31(a) partly on logical grounds and partly in deference to its possibly greater relevance in agriculture where short-term bank borrowing is a long-established means of funding working assets.

However, as the concept of net assets (that is, total assets less current liabilities) is often used as a measure of capital employed, the rate of return to net assets is also presented in Table 31(a). The measure of profit which is appropriate in the construction of this ratio is profit as defined above in connection with the measurement of return on total assets *minus* short-term interest charges (interest on bank overdrafts and other strictly short-term loans, and hire-purchase interest).

Reference to the annual movement of these rates of return to business assets, depicted in Table 31(a), shows that, for the sample as a whole, both rates experienced a marked fall between 1958/59 and 1967/68: the return

¹ If one is concerned solely with the economic aims of productive effort, then it is the achievement of high returns *in relation to the capital employed* which must be seen as the goal rather than one of profit maximisation.

² Profit, for the purposes of this study, is obtained by adding back to net farm income imputed charges in respect of rental value (in the case of owner-occupiers) and landlord-type improvements (in the case of tenants).

on total assets falling from 14.4 per cent to 9.4 per cent and that on net assets from 16.1 per cent to 10.0 per cent. The accompanying three-year average figures reveal, moreover, that these falls were part of a well-defined and consistent secular trend.

While the three sub-groups within the sample witnessed broadly similar declines in both their rate of return to total assets and that to net assets it is of interest to note that, in the case of the tenants, these trends were not really in evidence until the latter part of the ten-year period. Moreover, the general levels of return for this same group, measured by the three-year moving averages, was consistently higher than in the case of the other two sub-groups or in the case of the sample as a whole. This disparity is seen to be greatest when comparison of the tenant figures is made with those for the owner-occupiers, reflecting the downward pressure on the rates of return to both total and net assets exerted by the acknowledged low rate of return to farming assets in the form of land. This influence is also to be seen at work in the greater rate of decline in the returns to total and net assets which is visible in the case of the average figures for the transfer sub-group as its constituent farms rapidly assume the characteristics of owner-occupiers in the course of the study period.

An indication of this low return on assets in the form of land is provided by Table 31(b) which examines the relationship to the value of land held in owner-occupation (including buildings and relevant improvements) borne by the rental values imputed to that land for Farm Management Survey purposes. While the measures of return to land presented by this table can only be regarded as approximations by reason of the manner in which they were constructed, their general order of magnitude is at least largely consistent with estimates ventured by many independent observers.

The performance trends of the three sub-groups for the ten-year period are more directly comparable when rates of return which relate only to the customarily recognised tenant's assets are assessed, as in Table 31(c). In computing these rates of return the basis for determining the appropriate measure of profit was provided by the concept of net farm income in the derivation of which rental and interest charges in respect of owner-occupied land and landlord-type improvements have already been imputed.

Again, in Table 31(c), trends in the rates of return are represented by both annual figures and by three-year moving averages each basis of calculation having been employed for both total tenant's assets and net tenant's assets (total tenant's assets minus current liabilities). The most striking feature of this table is the fact that not only are the rates of return appertaining to the transfer group consistently higher than those for the other two sub-groups but the trend which they reveal is generally an upward one in contrast to the trend evidenced by the continuing owner-occupiers and tenants. This upward trend in the case of the transfer group is undoubtedly due to the more impressive income record of its constituent farms rather than any marked difference in the volume of tenant's assets employed.

The figures in Table 31(c) for the group of Wholly and Mainly Tenants are greater, of course, than those derived for the same group when com-

puting the returns to total assets—presented in Table 31(a)—due to the exclusion of the by no means insignificant element of owner-occupied land held by this group of farmers. However, they do reveal a similar tendency to an upward trend in the earlier part of the ten-year period which is reversed only in the last three years.

The Wholly and Mainly Owner-occupiers exhibit the greatest degree of stability in the rate of return to both total and net tenant's assets the annual figures for these two measures ranging only between 17.9 and 22.7 per cent and 21.6 and 27.7 per cent respectively.

The greater range which is present in all cases in the measurement of the return to net tenant's assets compared with the measurement of the return to total tenant's assets must be seen as stemming from the varying changes in the pattern of short-term borrowing discernible within the sample of 60 farms during the study period.

The final pair of this particular group of tables—Tables 31(d) and 31(e)—examines the rate of return on the long-term capital employed by the various tenancy groups within the sample from the respective stand-points of the two principal contributing sources of that capital: first, that of the external suppliers of funds at fixed rates of interest; and, second, that of the owner of the business himself, acting as an internal financing agent whose return is in the form of a residual after the external financing costs have been met.

Clearly, the rate of return earned by the long-term funds of the business in total will equate with the rate of return to net assets which has already been described, for net assets (total assets minus current liabilities) are, by virtue of the principles underlying the construction of the balance sheet, commensurate with long-term debt capital plus owner's equity capital (in other words, total liabilities minus current liabilities). The equality of these two rates of return (which, more appropriately, are to be regarded as two aspects of the same return) forms a common link between Table 31(a) on the one hand and Tables 31(d) and 31(e) on the other which is demonstrated by the reappearance, in these last two tables, under the heading of "Return on total long-term capital", of figures already presented in Table 31(a) as the "Return on net assets".

This manner of presentation has been adopted in the belief that a statement of the return on total long-term capital forms a useful preface to the subsequent examination of two other measures of return: first, the return which accrued, at a pre-determined rate, to the lenders of the long-term external capital employed in the sample businesses; and, second, the return ultimately accruing to the net worth (or equity) of the farmers concerned. For convenience, Table 31(d) presents the annual figures for both these measures of return and Table 31(e) the three-year moving averages derived from the annual data of the preceding table.

Reference to the trends depicted by these moving averages indicates that, in the case of the owner-occupiers, the rate of long-term interest changed relatively little over the study period, no doubt due to the fact that very little additional borrowing was undertaken during that time; indeed, as earlier sections have shown, these farms managed, as a group, to effect a net repayment of long and medium-term loans over the ten years from 1958/59 to 1967/68.

In contrast, both the tenant and the transfer groups reveal a marked increase in the average cost of long-term capital during the same period. This increase probably occurred as a result of the additional long-term borrowing to which these two groups resorted for the purpose of land purchase; this involved a relatively greater use being made of institutional sources of finance whose interest charges more directly reflect the open market rate than those resulting from family and private borrowing arrangements. Thus Table 31(d) shows that, while average rates of interest on long-term borrowed capital were, in the first year of the study for all groups, below the bank rate (markedly so in the case of the tenants, at 1.7 per cent), by the final year the average long-term interest rates paid by the tenants and transfers (6.2 and 6.0 per cent respectively) were much more in line with the official rate.¹

Despite the extent of the increases in the average annual rate of interest on long-term borrowed capital thus recorded for at least two of the sub-groups of the sample and the general downward trend in the rate of return on total long-term capital, the former rate remained well below the latter throughout the study period. As a result the rates of return on equity capital (net worth), which are included in Tables 31(d) and 31(e), are invariably higher than the rate of return on total long-term capital.

However, the generally low level of capital gearing evident among the farms in the sample (see Table 30) reflects itself in the relatively small margins which exist in all the tenancy groups between the recorded rate of return on total long-term capital and the recorded rate of return on equity capital irrespective of the degree of disparity between the average long-term external rate of interest and the overall average rate of return on total long-term capital employed.

¹ Figure 1, in Appendix F to this report, records in the form of a graph for the period of the study the relative movement of the Bank Rate and the average rate of long-term interest paid by farmers in the three sub-groups of the sample. Figure 2, Appendix B, similarly depicts the relative movement of the Bank Rate and the estimated rate of interest on short-term credit (bank overdrafts and other short-term loans) during the same period.

TABLE 29(a)

TRENDS IN SELECTED STRUCTURAL RATIOS: MAIN CATEGORIES OF ASSETS AS A PERCENTAGE OF TOTAL ASSETS

All Groups

1957/58 to 1967/68

Account Year Ending:	All Farms (60)			Wholly and Mainly Owner-occupiers (25)			Wholly and Mainly Tenants (22)			Transfers (13)		
	Fixed assets	Physical working assets	Liquid assets	Fixed assets	Physical working assets	Liquid assets	Fixed assets	Physical working assets	Liquid assets	Fixed assets	Physical working assets	Liquid assets
1957/58	% 73.4	% 17.3	% 9.3	% 80.1	% 12.8	% 7.1	% 67.6	% 21.0	% 11.4	% 58.7	% 27.2	% 14.1
1958/59	75.7	16.9	7.4	82.6	12.2	5.2	66.3	23.8	9.9	67.2	21.9	10.9
1959/60	77.1	16.5	6.4	82.2	12.6	5.2	70.4	21.3	8.3	72.4	20.4	7.2
1960/61	77.2	15.8	7.0	82.7	11.6	5.7	70.1	20.7	9.2	72.7	19.9	7.4
1961/62	77.7	15.7	6.6	82.9	11.7	5.4	70.0	21.1	8.9	74.6	18.6	6.8
1962/63	81.5	13.2	5.3	86.1	9.9	4.0	72.3	19.4	8.3	79.8	14.8	5.4
1963/64	81.2	13.2	5.6	85.8	9.8	4.4	70.6	20.6	8.8	80.8	13.8	5.4
1964/65	81.8	13.6	4.6	86.8	9.3	3.9	68.7	23.7	7.6	82.5	13.9	3.6
1965/66	81.4	13.5	5.1	85.5	10.0	4.5	72.6	20.3	7.1	80.8	14.6	4.6
1966/67	81.7	13.7	4.6	85.4	10.3	4.3	73.6	20.3	6.1	82.1	14.2	3.7
1967/68	84.8	10.6	4.6	88.6	7.8	3.6	75.8	17.8	6.4	84.4	10.3	5.3

TABLE 29(b)

**TRENDS IN SELECTED STRUCTURAL RATIOS: MAIN CATEGORIES OF LIABILITIES AS A
PERCENTAGE OF TOTAL LIABILITIES**

All Groups

1957/58 to 1967/68

Account Year Ending:	All Farms (60)			Wholly and Mainly Owner-occupiers (25)			Wholly and Mainly Tenants (22)			Transfers (13)		
	Net worth	Long and medium-term loans	Current liabilities	Net worth	Long and medium-term loans	Current liabilities	Net worth	Long and medium-term loans	Current liabilities	Net worth	Long and medium-term loans	Current liabilities
1957/58	% 82.2	% 6.5	% 11.3	% 82.5	% 10.0	% 7.5	% 79.5	% 1.6	% 18.9	% 85.5	% 1.3	% 13.2
1958/59	78.2	7.9	13.9	81.0	10.1	8.9	78.6	1.5	19.9	69.2	9.8	21.0
1959/60	76.0	8.1	15.9	80.0	9.1	10.9	71.9	3.9	24.2	70.5	11.1	18.4
1960/61	76.3	8.1	15.6	81.4	8.8	9.8	72.3	3.7	24.0	68.7	11.6	19.7
1961/62	76.4	7.7	15.9	81.7	8.2	10.1	70.7	3.8	25.5	70.7	10.9	18.4
1962/63	80.0	6.3	13.7	86.8	5.8	7.4	66.2	5.9	27.9	77.7	7.6	14.7
1963/64	79.2	6.9	13.9	86.4	6.2	7.4	66.0	5.6	28.4	75.2	9.8	15.0
1964/65	78.9	6.9	14.2	85.8	5.9	8.3	67.7	5.7	26.6	74.4	9.7	15.9
1965/66	79.2	7.1	13.7	87.0	5.5	7.5	65.6	7.2	27.2	75.5	10.2	14.3
1966/67	77.5	9.2	13.3	87.3	5.3	7.4	63.1	12.7	24.2	72.3	13.1	14.6
1967/68	82.5	7.2	10.3	90.4	3.9	5.7	65.6	11.4	23.0	81.0	9.9	9.1

TABLE 30

TRENDS IN SELECTED CREDIT RATIOS

All Groups
1957/58 to 1967/68

Account Year Ending:	All Farms (60)					Wholly and Mainly Owner-occupiers (25)					Wholly and Mainly Tenants (22)					Transfers (13)				
	TA	CA	LA	NW	NW	TA	CA	LA	NW	NW	TA	CA	LA	NW	NW	TA	CA	LA	NW	NW
	TEL	CL	CL	CL	DC	TEL	CL	CL	CL	DC	TEL	CL	CL	CL	DC	TEL	CL	CL	CL	DC
1957/58	5.6	2.4	0.8	7.3	12.7	5.7	2.7	0.9	11.1	8.2	4.9	1.7	0.6	4.2	49.2	6.9	3.1	1.1	6.5	68.1
1958/59	4.6	1.8	0.5	5.6	9.9	5.3	2.0	0.6	9.1	8.0	4.7	1.7	0.5	3.9	50.9	3.2	1.6	0.5	3.3	7.1
1959/60	4.2	1.4	0.4	4.8	9.3	5.0	1.6	0.5	14.0	8.8	3.6	1.2	0.3	3.0	18.6	3.4	1.5	0.4	3.8	6.3
1960/61	4.2	1.5	0.4	4.9	9.4	5.4	1.8	0.6	8.3	9.2	3.6	1.2	0.4	3.0	19.4	3.2	1.4	0.4	3.5	5.9
1961/62	4.2	1.4	0.4	4.8	10.0	5.5	1.7	0.5	8.1	10.0	3.4	1.2	0.3	2.8	18.9	3.4	1.4	0.4	3.8	6.4
1962/63	5.0	1.3	0.4	5.8	12.7	7.5	1.9	0.5	11.7	14.9	3.0	1.0	0.3	2.4	11.2	4.5	1.4	0.4	5.3	10.2
1963/64	4.8	1.3	0.4	5.7	11.4	7.4	1.9	0.6	11.7	14.0	2.9	1.0	0.3	2.3	11.8	4.0	1.3	0.4	5.0	7.7
1964/65	4.7	1.3	0.3	5.5	11.5	7.0	1.6	0.5	10.3	14.5	3.1	1.2	0.3	2.5	12.0	3.9	1.1	0.2	4.7	7.6
1965/66	4.8	1.4	0.4	5.8	11.1	7.7	1.9	0.6	11.7	15.7	2.9	1.0	0.3	2.4	9.2	4.1	1.3	0.3	5.3	7.4
1966/67	4.4	1.4	0.3	5.8	8.4	7.9	2.0	0.6	11.8	16.5	2.7	1.1	0.3	2.6	5.0	3.6	1.2	0.3	5.0	5.5
1967/68	5.7	1.5	0.5	8.0	11.5	10.4	2.0	0.6	15.9	23.0	2.9	1.1	0.3	2.8	5.7	5.3	1.7	0.6	8.9	8.2

Key to ratio symbols:

TA —Total assets

TEL —Total external liabilities

CA —Current assets

CL —Current liabilities

LA —Liquid assets

NW —Net worth

DC —Debt capital

TABLE 31(a)

**SOME MEASURES OF RETURN ON CAPITAL EMPLOYED: RETURNS ON TOTAL ASSETS AND
ON NET ASSETS**

All Groups

1958/59 to 1967/68

Year ¹	All Farms (60)				Wholly and Mainly Owner-occupiers (25)				Wholly and Mainly Tenants (22)				Transfers (13)			
	Return on total assets		Return on net assets		Return on total assets		Return on net assets		Return on total assets		Return on net assets		Return on total assets		Return on net assets	
	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average
1958/59	% 14.4	% —	% 16.1	% —	% 11.6	% —	% 12.4	% —	% 17.0	% —	% 20.5	% —	% 19.4	% —	% 23.2	% —
1959/60	12.2	12.8	13.8	14.4	10.4	10.8	11.2	11.6	15.0	15.2	18.5	18.7	13.3	15.0	15.9	17.9
1960/61	12.0	12.2	13.5	13.8	10.5	10.7	11.2	11.5	13.8	14.1	17.2	17.5	13.4	13.6	15.7	15.6
1961/62	12.4	12.0	14.1	13.5	11.2	10.3	12.0	11.0	13.5	14.5	16.9	18.5	14.1	13.1	16.6	15.2
1962/63	11.6	10.9	13.1	12.3	9.4	9.1	9.9	9.7	16.2	14.6	21.1	18.9	12.1	11.3	13.7	12.8
1963/64	9.2	10.7	10.2	11.9	7.4	8.5	7.8	9.0	14.1	16.3	18.5	21.3	8.6	10.3	9.6	11.5
1964/65	11.4	10.4	12.6	11.4	8.9	8.5	9.3	8.9	18.5	15.2	24.0	19.6	10.4	10.1	11.5	11.1
1965/66	10.5	10.3	11.4	11.2	9.1	8.6	9.5	9.0	13.1	14.4	16.4	18.1	10.9	10.0	12.0	10.9
1966/67	9.1	9.6	9.8	10.4	7.9	8.0	8.2	8.3	12.1	12.7	14.8	15.6	8.8	10.0	9.4	10.8
1967/68	9.4	—	10.0	—	7.3	—	7.5	—	12.9	—	15.7	—	10.3	—	11.0	—

¹ Middle year of basis period in the case of the three-year moving average.

TABLE 31(b)

**SOME MEASURES OF RETURN ON CAPITAL EMPLOYED: ESTIMATED RATES OF RETURN¹ ON
OWNER-OCCUPIERS' LAND, BUILDINGS AND IMPROVEMENTS²**

**All Groups
1958/59 to 1967/68**

Year ³	All Farms (60)		Wholly and Mainly Owner-occupiers (25)		Wholly and Mainly Tenants (22)		Transfers (13)	
	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average
1958/59	2.9	—	3.0	—	1.5	—	2.2	—
1959/60	3.4	3.3	3.1	3.1	6.0	4.2	3.9	3.6
1960/61	3.4	3.4	3.1	3.2	4.4	4.7	3.8	3.7
1961/62	3.4	3.1	3.3	3.0	4.1	4.2	3.4	3.1
1962/63	2.7	2.7	2.7	2.7	4.2	3.9	2.6	2.5
1963/64	2.3	2.6	2.3	2.5	3.6	3.9	2.1	2.5
1964/65	2.7	2.6	2.5	2.5	3.9	3.6	2.8	2.6
1965/66	2.8	2.8	2.6	2.6	3.4	3.6	2.9	3.0
1966/67	2.9	2.8	2.7	2.5	3.6	3.9	3.2	2.9
1967/68	2.6	—	2.3	—	4.2	—	2.7	—

¹ Calculated from imputed rental values determined in accordance with standard Farm Management Survey practice.

² See Appendix B for basis of valuation.

³ Middle year of basis period in the case of the three-year moving average.

TABLE 31(c)

**SOME MEASURES OF RETURN ON CAPITAL EMPLOYED: RETURNS ON TENANT'S ASSETS
AND ON NET TENANT'S ASSETS**

All Groups

1958/59 to 1967/68

Year ¹	All Farms (60)				Wholly and Mainly Owner-occupiers (25)				Wholly and Mainly Tenants (22)				Transfers (13)			
	Return on tenant's assets		Return on net tenant's assets		Return on tenant's assets		Return on net tenant's assets		Return on tenant's assets		Return on net tenant's assets		Return on tenant's assets		Return on net tenant's assets	
	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average	Annual	3-year moving average
1958/59	% 21.9	% —	% 27.1	% —	% 22.7	% —	% 27.3	% —	% 19.5	% —	% 24.4	% —	% 24.5	% —	% 31.3	% —
1959/60	18.8	19.9	24.4	25.6	20.1	21.0	25.2	26.1	17.3	17.7	22.8	23.2	18.6	21.1	25.6	28.5
1960/61	19.0	19.2	25.1	25.4	20.4	20.9	25.7	26.2	16.5	16.6	22.4	22.3	20.3	20.5	28.5	28.8
1961/62	19.8	19.8	26.5	26.6	22.1	21.1	27.7	26.5	15.9	17.4	21.7	24.2	22.4	21.7	32.1	30.9
1962/63	20.6	19.3	28.1	26.2	20.8	20.2	26.0	25.2	19.5	17.5	28.2	25.2	22.3	20.7	31.9	29.9
1963/64	17.6	20.2	24.1	27.7	17.9	20.2	22.3	25.3	17.2	19.8	25.5	28.9	17.6	20.8	25.8	30.5
1964/65	22.3	20.0	30.7	27.3	22.0	20.7	27.7	25.8	22.5	18.5	32.5	26.6	22.4	21.3	33.8	32.0
1965/66	20.0	19.6	27.1	26.5	21.9	20.5	27.2	25.4	15.8	17.7	22.1	25.1	23.7	21.3	36.1	31.7
1966/67	16.9	18.9	22.4	25.2	17.9	19.5	21.6	23.7	15.2	16.1	21.2	22.6	18.1	22.5	25.9	32.8
1967/68	19.7	—	26.2	—	18.8	—	22.6	—	17.2	—	24.4	—	25.4	—	36.2	—

¹ Middle year of basis period in the case of the three-year moving average.

TABLE 31(d)

**SOME MEASURES OF RETURN ON CAPITAL EMPLOYED: ANNUAL RETURNS
ON LONG-TERM CAPITAL**

All Groups

1958/59 to 1967/68

Year	All Farms (60)			Wholly and Mainly Owner-occupiers (25)			Wholly and Mainly Tenants (22)			Transfers (13)		
	Return on total long- term capital	Rate of interest on debt capital	Return on equity capital	Return on total long- term capital	Rate of interest on debt capital	Return on equity capital	Return on total long- term capital	Rate of interest on debt capital	Return on equity capital	Return on total long- term capital	Rate of interest on debt capital	Return on equity capital
1958/59	16.1	3.0	17.2	12.4	3.0	13.6	20.5	1.7	20.8	23.2	3.7	24.7
1959/60	13.8	3.5	14.9	11.2	3.6	12.1	18.5	1.0	19.2	15.9	4.2	17.7
1960/61	13.5	4.0	14.5	11.2	3.3	12.1	17.2	4.3	17.9	15.7	5.3	17.4
1961/62	14.1	4.5	15.1	12.0	3.9	12.8	16.9	6.4	17.4	16.6	4.8	18.4
1962/63	13.1	4.5	13.8	9.9	4.0	10.4	21.1	4.4	22.3	13.7	5.5	14.7
1963/64	10.2	3.8	10.7	7.8	3.0	8.1	18.5	4.1	19.8	9.6	5.0	10.2
1964/65	12.6	4.2	13.3	9.3	4.0	9.7	24.0	3.9	25.7	11.5	4.7	12.3
1965/66	11.4	4.7	12.0	9.5	3.1	9.9	16.4	3.9	17.6	12.0	6.2	12.7
1966/67	9.8	5.0	10.3	8.2	3.9	8.4	14.8	5.4	16.3	9.4	5.6	10.0
1967/68	10.0	5.3	10.5	7.5	3.2	7.7	15.7	6.2	17.5	11.0	6.0	11.7

TABLE 31(c)

**SOME MEASURES OF RETURN ON CAPITAL EMPLOYED: MOVING AVERAGE
RETURNS¹ ON LONG-TERM CAPITAL**

All Groups

1958/59 to 1967/68

Year ²	All Farms (60)			Wholly and Mainly Owner-occupiers (25)			Wholly and Mainly Tenants (22)			Transfers (13)		
	Return on total long- term capital	Rate of interest on debt capital	Return on equity capital	Return on total long- term capital	Rate of interest on debt capital	Return on equity capital	Return on total long- term capital	Rate of interest on debt capital	Return on equity on capital	Return on total long- term capital	Rate of interest on debt capital	Return on equity capital
1959/60	14.4	3.6	15.7	11.6	3.3	12.6	18.7	2.7	19.2	17.9	4.6	19.7
1960/61	13.8	4.0	14.8	11.5	3.6	12.4	17.5	4.2	18.1	15.6	4.8	17.9
1961/62	13.5	4.3	14.5	11.0	3.7	11.7	18.5	4.9	19.3	15.2	5.2	16.6
1962/63	12.3	4.3	13.0	9.7	3.6	10.2	18.9	4.7	19.9	12.8	5.1	13.8
1963/64	11.9	4.2	12.6	9.0	3.7	9.4	21.3	4.1	22.7	11.5	5.0	12.3
1964/65	11.4	4.3	12.1	8.9	3.4	9.3	19.6	4.0	21.0	11.1	5.3	11.8
1965/66	11.2	4.7	11.9	9.0	3.7	9.3	18.1	4.6	19.7	10.9	5.6	11.7
1966/67	10.4	5.0	10.9	8.3	3.4	8.6	15.6	5.5	17.1	10.8	6.0	11.5

¹ Based on calculated three-year moving averages.

² Middle year of basis period.

VIII

COMPARISON OF THE STRUCTURE OF ASSETS AND LIABILITIES AND OF SOURCES AND DISPOSALS OF FARMING FUNDS

1949/50 TO 1958/59 AND 1958/59 TO 1967/68

In this, the last of the sections of this report which presents in some detail the findings of the study on which it is based, an attempt is made to compare some of those findings with data derived from the earlier farm business study undertaken by this Unit to which reference has already been made.¹ The scope of this comparison is necessarily limited by the fact that this earlier study confined its analysis to an investigation of data relating to the sample farms as a whole and only data from the more recent enquiry which is presented on an "all farms" basis, therefore, lend themselves to this comparison. Moreover, a certain amount of recasting of the material from both studies has been necessary in order to achieve comparability.

First, some adjustment of the estimated values of land and buildings and improvements employed in the earlier study was required to place the valuation of these assets on the same basis as that adopted for the 1958/59 to 1967/68 study.

Secondly, some attempt to separately distinguish breeding livestock within the global valuation figures employed in the earlier study was necessary if a comparison was to be undertaken which retained the later classification of assets into fixed and current. In the event, a simple proportional division of the total inventory, based on the evidence of the consistent pattern revealed by the more recent investigation, was adopted.

Thirdly, the analysis of asset structure undertaken for this report has strictly confined itself to farming assets and has made no attempt, as the previous survey did, to measure the farmer's financial reserves (other than balances on bank current accounts and cash in hand) for the purpose of including them in the list of business assets. Practical difficulties are soon encountered in any attempt to distinguish between those funds held outside the farm business which represent reserves which can be retrieved by the farm business at fairly short notice and those which constitute funds more permanently removed from the business. In the circumstances, therefore, it was felt that all financial reserves, other than those held in connection with the day-to-day running of the farm, should be regarded as having been removed from the farm business, no matter how temporary that removal may be, and as representing a potential source of non-farm income to the farmer. Moreover an added difficulty in any treatment of financial reserves as a component of business assets will be the absence in many cases of any guarantee of exhaustiveness in respect of data which might be derived from this understandably sensitive area of a farmer's financial affairs. Consequently in comparing data for the two consecutive ten-year periods it has been necessary to modify the asset and liability structure for the earlier of these periods by the exclusion of those funds represented in that structure by the category "Financial reserves".

¹ Rickard, R. C., Luxton, H. W. B., and Morris, S. T., *op. cit.*

Fourthly, to place the data from the two samples on a comparable footing it has also been necessary, in the case of the data for the 72 farms comprising the earlier sample, to re-absorb the separately distinguished tax reserve component into the overall measure of net worth as it was considered impossible to estimate, with sufficient accuracy to warrant the exercise,¹ the outstanding tax liability at the conclusion of the study period for the more recent sample of farms as a whole.

Finally, it must be emphasised that the term "other short-term loans" included in the caption "Bank overdrafts and other short-term loans" which is used in the tabulating of comparative data at the end of this section, refers to loans which are strictly repayable in the short period. They are mostly of a private, as distinct from an institutional or commercial, character and form only a very small proportion of the total advances in this particular category. In contrast, the loans separately described in the earlier study as "short-term loans" were found to be more akin to those loans which were classed in this study, as medium-term loans—that is repayable over periods from one to ten years—and for the purposes of the present comparison, therefore, they have been included under the heading of "long and medium-term loans".

Turning now to the contents of the tables which appear at the end of this section, it will be seen that Table 32 records the changes in the tenure structure of South Western F.M.S. farms over the period 1949/50 to 1967/68 as reflected by the two samples of such farms which respectively formed the basis of the two balance sheet enquiries which have now been undertaken by this Unit. The first of these samples consisted of 72 farms and the second of 60 farms but a measure of continuity is imparted to the consecutive periods concerned by the fact that the financial records of 36 F.M.S. co-operators featured in both surveys. With this in mind, the increasing trend to land ownership over the period 1958/59 to 1967/68, which has formed the background to much of the analysis presented in this report, is seen as the continuation of a trend which has been in operation since the early post-war years.

This trend in the structure of tenure over the period from 1949/50 to 1967/68 presents itself in financial terms, when the aggregated asset data for the two samples are compared in Table 33, as a vastly increased investment in farming property at the expense of the relative importance of all other classes of assets although these other assets, with the exception of liquid holdings, provide evidence of substantially increased investment in overall monetary terms. For example, on a per farm basis, machinery and equipment increased by more than fourfold and monies owing ("debtors, short-term loans, and prepayments") by more than five times. Liquid assets in the form of cash at bank and cash in hand, however, increased only negligibly over the twenty-year period from £455 to £504 and this factor must be seen as a major one, operating in association with the rising importance of real estate assets, in bringing about the decline in

¹ The individual farmer will always be advised, of course, to make adequate provision, in any review of his liabilities, for the discharge of impending tax liabilities. Assessment of that liability, in the context of the family farm operating as a sole trader or partnership, can only be satisfactorily undertaken, however, with full access to the taxpayer's personal circumstances.

importance of liquid assets from something like ten per cent to two per cent over the period.

Against this changing pattern of assets the pattern of liabilities, as revealed by a comparison of the data from the two samples in Table 34, appears relatively stable. However, as the analysis relating to the constituent sub-groups undertaken in connection with the more recent sample has shown, this apparent stability may well conceal contrasting trends in the use which is made of the various sources of funds by farm businesses exhibiting quite basic differences in their financial structure. For example, additional borrowing within the sample for the purposes of land purchase is obviously counterbalanced in part by repayments of long-term borrowed capital by those businesses at a more advanced stage in the transition to unencumbered land-ownership. Moreover, it should not be overlooked that, over the period of the two studies, long-term debt capital would certainly have featured with increasing relative importance in the liability structures of the two farm samples and their overall net worth position shown considerable deterioration had it not been for the effect of rising unit land values which is incorporated in the total recorded valuations of land, buildings and improvements.

There is always a risk, of course, that quite significant changes in the area of short-term liabilities will tend to be obscured by too great a concern with the dominating relative importance of long-term capital within the total liability structure. However, as reference to the "per farm" figures of Table 34 shows, short-term credit extended by merchants and others increased by nearly six times and the average level of bank advances nearly ninefold over the twenty-year period. Such trends are striking in themselves but the true significance of changes in short-term indebtedness can be assessed, as was demonstrated in the previous section of this report, only in relation to the changes which have taken place in short-term (that is, current) assets. An attempt, therefore, to discern the changes which have occurred in this relationship over the period from 1949/50 to 1967/68, together with the trends in other important balance sheet relationships, has been made in Table 35 by comparing ratios constructed from modified data derived from the earlier study with those already obtained in connection with the more recent enquiry.

Turning first to the ratios which give expression to the short-term asset and liability positions revealed by the two samples, it will be noted that both the current ratio (current assets to current liabilities) and the liquidity ratio (liquid assets to current liabilities) narrowed markedly over the twenty-year period, the trend in the second half of that period proving again to be a continuation of a tendency which was already present in the preceding decade. Thus, the current ratio contracted from 4.0:1 to 1.5:1 and the liquidity ratio from 1.5:1 to 0.5:1, with the possibility that the latter figure might have been more critical had the exceptionally high influx of external funds not occurred in the case of a small number of farms during the last year (1967/68). The importance of the fall in the current ratio assumes greater proportions in view of the increased prominence of physical working assets (stocks and work in progress) within the context of current assets as a whole. This changed emphasis is discernible from an inspection of the relative falls in importance of working and liquid assets within the overall asset structure which are demonstrated by the first group of ratios in Table 35.

The remaining ratios quantify changes in some of the longer-term financial relationships revealed by a comparison of these two similar samples which, together, span the period from 1949/50 to 1967/68. The growth in the incidence of land-ownership within the samples (frequently from a favoured position of sitting tenancy) which is depicted by Table 33 and which took place over a period of generally rising land values is seen in Table 35 to have resulted in an increase in the relative importance of fixed assets within the structure of total assets from something like two-thirds to more than four-fifths. This has provided the necessary collateral for funding from borrowed sources not only the long-term assets themselves but also the greater volume of short-term working assets which an increasing level of production has entailed. As a result the overall net worth position revealed by the two samples has fallen from some 86 per cent to some 82 per cent. That this latter figure is no lower and, indeed, exhibits a degree of recovery from the intermediate figures for 1958/59 is due, as the more detailed analysis for the period 1958/59 to 1967/68 has shown, to the measure of appreciation which has been imputed to the land component of the fixed assets of these farm businesses.

The amount of cover afforded the various creditors to the businesses comprising the two samples, as indicated by the relationship which net worth bears to current liabilities and to long-term borrowed capital, similarly reflects this revaluation of farm property but, despite this, these ratios are still seen to be considerably narrower in 1967/68 than they were in 1949/50.

This section will be concluded by a comparison of the respective flows of funds which were recorded for the two samples in respect of the periods, 1949/50 to 1958/59 and 1958/59 to 1967/68. By the procedure already employed in Sections V and VI it is possible to present a detailed picture of the way in which funds moved into, out of, and within the farm business in order to produce modified asset and liability structures at the end of the two respective periods.

Table 36 shows, in respect of the derivation of additional funds by the sample farms during the two periods under review, that although the dominant proportion of all such funds was generated as farm earnings by the business itself the proportion of 73 per cent for the period 1958/59 to 1967/68 showed some diminution from the comparable figure for the period 1949/50 to 1958/59 (79 per cent). Farm funds were supplemented by borrowed funds at much the same overall level in both periods, long and short-term credit together amounting to nine per cent of all funds in each, so that the falling importance of farm earnings as a source of funds was counterbalanced in the main by the increased importance (from four to eight per cent) assumed by the net inflow of funds from the farmers' off-farm reserves although an increase from one per cent to two per cent in the relatively unimportant source of capital grants was also registered.

Differences in the pattern of fund disposal between the sample data for the two periods, revealed by Table 37, show a number of interesting features even if these variations, too, are not particularly large. The outlay on fixed assets remained remarkably consistent in total accounting for 41 per cent and 42 per cent for the earlier and the later period respectively. However, there was some displacement of relative importance between purchase of

land and investment in improvements on the one hand and the purchase of machinery and equipment on the other with the former outlet becoming slightly the more important investment area as far as fixed assets were concerned.

In the area of working assets, physical assets embodied in the stock valuations continued to increase in the more recent period but commanded a slightly smaller proportion of total fund allocation while increases in financial assets (debtors and cash balances) accounted for only a modest but consistent one per cent of that allocation.

In total, drawings from the farm businesses included in the more recent sample increased slightly in relative importance over the ten years 1958/59 to 1967/68, accounting for some 44 per cent of allocated funds compared with 42 per cent for the earlier sample. However, this trend conceals a decline in the relative importance of personal drawings as charges on income (fixed interest and income tax) rose from five to ten per cent of all allocated funds.

Finally, a net movement of funds away from the farm business to other areas of investment, thus variously providing the farmers concerned with a supplementary source of income, a potential source of future business funds or a contingency reserve, continued at much the same level during the two periods: five per cent of all allocated funds in the later span of years compared with six per cent in the earlier.

TABLE 32

COMPARISON OF CHANGES IN THE STRUCTURE OF LAND TENURE
Two Samples of Farm Businesses in South West England¹
1949/50 to 1958/59 and 1958/59 to 1967/68

<i>Land Farmed²</i>	1949/50		1958/59				1967/68	
	<i>72 farms</i>		<i>72 farms</i>		<i>60 farms</i>		<i>60 farms</i>	
	<i>acres</i>	<i>per cent</i>	<i>acres</i>	<i>per cent</i>	<i>acres</i>	<i>per cent</i>	<i>acres</i>	<i>per cent</i>
Tenanted land	7,066	78	5,730	60	4,392	57	3,466	38
Owner-occupied land ...	1,956	22	3,849	40	3,320	43	5,623	62
Total	9,022	100	9,579	100	7,712	100	9,089	100

1 Derived from Farm Management Survey records: 36 businesses common to both samples.

2 Inclusive of rough grazings (unadjusted).

TABLE 33

COMPARISON OF AGGREGATED ASSETS AT ACCOUNTING YEAR END
Two Samples of Farm Businesses in South West England¹
1949/50, 1958/59 and 1967/68

Nature of Asset	1949/50			1958/59						1967/68		
	72 farms			72 farms			60 farms			60 farms		
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent
	£	£		£	£		£	£		£	£	
FIXED ASSETS												
Land, buildings and vested improvements ²	105,624	1,467	32	238,638	3,314	36	253,768	4,230	38	994,964	16,583	62
Improvements undertaken as tenant	3,620	50	1	20,020	278	3	18,363	306	3	27,965	466	2
Machinery and equipment	41,732	580	12	106,457	1,479	16	116,127	1,935	18	153,788	2,563	10
Breeding livestock	71,075 ³	987	21	119,457 ³	1,659	18	108,715	1,812	17	175,671	2,928	11
Intangible assets	—	—	—	—	—	—	—	—	—	390	6	**
Total Fixed Assets ...	222,051	3,084	66	484,572	6,730	73	496,973	8,283	76	1,352,778	22,546	85
CURRENT ASSETS												
Stock valuation	71,074	987	21	119,456	1,659	18	111,011	1,850	17	169,130	2,819	10
Debtors, short-term loans and prepayments ...	9,456	131	3	24,669	343	4	24,511	408	4	43,819	730	3
Cash at bank and in hand	32,723	455	10	31,483	437	5	24,346	406	3	30,232	504	2
Total Current Assets ...	113,253	1,573	34	175,608	2,439	27	159,868	2,664	24	243,181	4,053	15
TOTAL ASSETS	335,304	4,657	100	660,180	9,169	100	656,841	10,947	100	1,595,959	26,599	100

¹ Derived from Farm Management Survey records: 36 businesses common to both samples.

² Based on standard values derived from a series of land prices (Agricultural Land Prices in England and Wales, 1945-1970) compiled by the Inland Revenue and appended to MAFF Press Notice No. 276 of 6.7.70. See also Appendix B.

³ Estimated value of breeding livestock element within the total live and dead stock valuation figure.

** Insignificant

TABLE 34

COMPARISON OF AGGREGATED LIABILITIES AT ACCOUNTING YEAR END
Two Samples of Farm Businesses in South West England¹
1949/50, 1958/59 and 1967/68

Nature of Liability	1949/50			1958/59						1967/68		
	72 farms			72 farms			60 farms			60 farms		
	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent	Total	Per farm	Per cent
LONG-TERM LIABILITIES	£	£		£	£		£	£		£	£	
Net worth	288,416	4,005	86	527,633	7,328	80	513,756	8,562	78	1,316,813	21,947	83
Long and medium-term loans	18,397	256	6	51,276	712	8	51,769	863	8	114,788	1,913	7
Total Long-term Liabilities	306,813	4,261	92	578,909	8,040	88	565,525	9,425	86	1,431,601	23,860	90
CURRENT LIABILITIES												
Sundry creditors	17,863	248	5	44,676	621	7	49,795	830	8	84,982	1,416	5
Bank overdrafts	10,628	148	3	36,595	508	5	41,521	692	6	79,376	1,323	5
Total Current Liabilities	28,491	396	8	81,271	1,129	12	91,316	1,522	14	164,358	2,739	10
TOTAL LIABILITIES	335,304	4,657	100	660,180	9,169	100	656,841	10,947	100	1,595,959	26,599	100

¹ Derived from Farm Management Survey records: 36 businesses common to both samples.

TABLE 35

COMPARISON OF SOME SELECTED FINANCIAL RATIOS

Two Samples of Farm Businesses in South West England¹
1949/50, 1958/59 and 1967/68

Ratio	1949/50	1958/59		1967/68
	72 farms	72 farms	60 farms	60 farms
STRUCTURAL RATIOS				
Assets as a Percentage of Total Assets				
Fixed assets	66.2	73.4	75.7	84.8
Physical working assets ...	21.2	18.1	16.9	10.6
Liquid assets	12.6	8.5	7.4	4.6
Liabilities as a Percentage of Total Liabilities				
Net worth	86.0	79.9	78.2	82.5
Long and medium-term loans	5.5	7.8	7.9	7.2
Current liabilities	8.5	12.3	13.9	10.3
CREDIT RATIOS				
Total assets to total external liabilities	7.2:1	5.0:1	4.6:1	5.7:1
Current assets to current liabilities	4.0:1	2.2:1	1.8:1	1.5:1
Liquid assets to current liabilities	1.5:1	0.7:1	0.5:1	0.5:1
Net worth to current liabilities	10.1:1	6.5:1	5.6:1	8.0:1
Net worth to long-term debt capital	15.7:1	10.3:1	9.9:1	11.5:1

¹ Derived from Farm Management Survey records: 36 businesses common to both samples.

TABLE 36

COMPARISON OF SOURCES OF FUNDS
Two Samples of Farm Businesses in South West England¹
1949/50 to 1958/59 and 1958/59 to 1967/68

Sources	1949/50 to 1958/59			1958/59 to 1967/68		
	72 farms			60 farms		
	Total	Per farm	Per cent	Total	Per farm	Per cent
FARM SOURCES	£	£		£	£	
Farm earnings ...	817,076	11,348	79	1,318,305	21,972	73
Sale of land	20,297	282	2	47,503	792	3
Sale of machinery and equipment	48,880	679	5	93,314	1,555	5
Net decrease in valuation	—	—	—	—	—	—
Net decrease in liquid assets	—	—	—	—	—	—
Total Funds from Farm Sources ...	886,253	12,309	86	1,459,122	24,319	81
OTHER SOURCES						
Capital grants ...	11,949	166	1	38,996	650	2
Non-capital funds introduced by farmer ²	42,463	590	4	135,345	2,256	8
Net increase in long and medium-term loans	36,979	513	3	76,231	1,270	4
Net increase in current liabilities	60,185	836	6	97,059	1,618	5
Total Funds from Other Sources ...	151,576	2,105	14	347,631	5,794	19
TOTAL DISPOSABLE FUNDS	1,037,829	14,414	100	1,806,753	30,113	100

¹ Derived from Farm Management Survey records: 36 businesses common to both samples.

² Inflow of interest and income from non-farm investment holdings (including property) and of other private receipts of a non-capital or windfall nature.

TABLE 37

COMPARISON OF DISPOSALS OF FUNDS
Two Samples of Farm Businesses in South West England¹
1949/50 to 1958/59 and 1958/59 to 1967/68

<i>Disposals</i>	1949/50 to 1958/59			1958/59 to 1967/68		
	<i>72 farms</i>			<i>60 farms</i>		
	<i>Total</i>	<i>Per farm</i>	<i>Per cent</i>	<i>Total</i>	<i>Per farm</i>	<i>Per cent</i>
	£	£		£	£	
FARM INVESTMENTS						
Purchase of land and buildings and expenditure on improvements	180,055	2,501	17	406,108	6,769	22
Purchase of machinery and equipment	243,403	3,381	24	350,751	5,846	20
Net increase in valuation	104,859	1,456	10	137,016	2,284	8
Net increase in liquid assets	14,888	207	1	18,869	314	1
Total Farm Investments	543,205	7,545	52	912,744	15,213	51
NON-FARM ALLOCATIONS						
Charges on income	54,371	755	5	179,115	2,985	10
Personal drawings	377,218	5,239	37	618,767	10,313	34
Total Drawings and Charges	431,589	5,994	42	797,882	13,298	44
Net transfers to off-farm investments and reserves ²	63,035	875	6	96,127	1,602	5
Net decrease in long and medium-term loans	—	—	—	—	—	—
Net decrease in current liabilities	—	—	—	—	—	—
Total Non-farm Allocations	494,624	6,869	48	894,009	14,900	49
TOTAL ALLOCATED FUNDS	1,037,829	14,414	100	1,806,753	30,113	100

¹ Derived from Farm Management Survey records: 36 businesses common to both samples.

² Net transfer of funds to off-farm investment holdings (including property) and capital reserves.

IX SUMMARY

This report is based on the analysis of the financial records of 60 farm businesses in South West England extending over the period from 1958/59 to 1967/68. All of the farmers involved had operated during this period either as a sole trader or the senior principal in a partnership. Their average age in 1967/68, at 55, was fairly high but all had been actively engaged in farming on a full-time, bona-fide basis.

The average size of the farms in the sample, which increased from 128 acres in 1958/59 to 150 acres in 1967/68, conceals a considerable variation in individual farm size but the range encountered was not inconsistent with a general description of the farms as being of a predominantly livestock type and essentially of a family character.

The most significant aspect of the structure of these farms, however—in the context of this report—has proved to be the distinctions and trends discernible in their tenancy arrangements. These were made the basis for differentiation within the sample and, in the event, three sub-groups were identified, the first consisting of farmers who were owner-occupiers (or mainly so) throughout the study period, the second of farmers who remained wholly or mainly tenants for that period, and the third of farmers who, in the course of the study period, acquired the title to a sufficient proportion of their farm land to change their status from essentially that of a tenant to one of an owner-occupier. The features by which these three groups were distinguished were later found to be the source of important differences in the changing financial structure and associated flows of funds of those groups.

These structural changes took place against a background of general increases in average net farm income per farm—greatest for the transfers, least for the owner-occupiers—which were seen to have occurred, notwithstanding the fact that costs per farm in all groups tended, if only marginally, to increase over the period at a faster rate than output. The increases in acreage which all groups experienced, however, resulted in much more modest increases in net farm income per acre being recorded for the tenants and transfers and an actual fall, albeit a small one, in the net farm income per acre of the owner-occupier group.

On the basis of the valuations employed for the study (which included realistic initial and periodic revaluations of farm property) the total value of farm assets for the identified groups showed marked increases over the ten-year period ranging from just over a doubling of that value for the tenants to an increase of four and a half times for the transfer group. The growing investment in land was the largest single factor in this increase although, for the owner-occupiers, this growth in the relative importance of land as an asset primarily stemmed from the appreciation in value of existing land assets; for the tenants, mainly from the occupation of additional land as owner; and for the transfers from the operation of both these factors with roughly equal importance.

The effect of these trends in the value of land assets was so overriding that, despite their increased value in absolute money terms, the relative importance of most other categories of assets (comprising the traditional

“tenant’s assets”) within the overall asset structure of the various groups declined. However the relative importance of fixed tenant’s assets and current assets within total tenant’s assets and of physical working assets within current assets remained strikingly consistent for individual groups throughout the study period although some proportional differences were evident between the groups. But, for all groups, some evidence was visible of a change in emphasis within financial working assets (liquid assets) which resulted in the rather less liquid components of this group of assets (principally debtors) assuming at least an equal importance with bank and cash balances. The latter were, in fact, the only category of assets which witnessed a general decline in absolute money terms during the decade covered by the study.

An examination of the composition of the overall liability structure of the study sample as a whole revealed little change in the relative importance assumed by net worth due, in large measure, to the accretions to the owner’s own capital investment resulting from appreciating land values which maintained the net worth position in the face of substantial increases in the volume of borrowed funds employed by these farms. However, the picture presented by the sample as a whole conceals important differences in the changes which took place in the liability structures of the individual tenancy groups.

For the owner-occupiers, long-term borrowings fell as loan repayments exceeded new borrowing and short-term borrowing showed only a modest increase compared with that undertaken by the other groups. As a result borrowed funds, in total, declined in relative importance within the liability structure and the farmers’ net worth position was correspondingly strengthened.

In the case of the other two groups—the tenants and the transfers—long-term borrowing, particularly for the purchase of land, and also short-term borrowing increased with the result that, notwithstanding some accrual in value to net worth with appreciating land value, the equity of both groups experienced a measure of decline in relative importance as a component of liabilities.

The pattern of long-term borrowing in all three tenancy groups revealed a continuing strong attachment to family and private sources throughout the study period although there was some evidence, on the part of the two groups which found a need to extend the level of their borrowing, of a tendency to utilise to a much greater extent the public lending agencies.

Within the liability sector representing short-term borrowing, both the use of merchant credit and bank overdraft facilities were found in general to have increased considerably, the only exception being the owner-occupiers’ use of trade credit which increased only modestly. In all other cases increases in the use of these two sources of credit amounting to between two and five times their 1958/59 level were recorded by the end of the period.

Analysis of the flows of funds over the ten-year period for each of the three tenancy groups of the sample revealed that, as one would normally expect, farm earnings contributed the major share of the additional funds injected into the businesses. With some supplementation of these earnings

in the form of proceeds from the sale of capital assets this overall share of funds emanating from the farm sector amounted to four-fifths for the owner-occupiers, three-quarters for the tenants, and two-thirds for the transfers.

Slightly over three-quarters of the funds from non-farming sources supplied to the group of owner-occupiers were provided by the farmers themselves from their personal reserves while, in the case of the tenants and transfers, approximately half of all such external funds came from this same source despite the larger volume of additional funds flowing through these two groups of businesses (particularly the transfer group) as a result, in the main, of land purchases. Government grants towards the cost of fixed assets represented a negligible source of funds in the case of all three groups.

Although the period of the study witnessed an increase in the relative importance of long and medium-term credit in the liability structures of the tenant and transfer groups contributions from this source to the total flow of funds still only amounted to a small proportion (five and eight per cent respectively) while it featured not at all as a contributor to the total disposable funds of the owner-occupiers due to the net repayment of long and medium-term loans effected by this group of businesses.

For the tenants family sources and the Agricultural Mortgage Corporation, between them in roughly equal proportions, contributed the preponderance of additional long-term credit but, for the transfers, the clearing banks and private sources (other than from within the family) also emerged as important suppliers of long-term finance although the A.M.C. remained the largest single source by contributing more than a third of the total of such additional finance.

Short-term sources of finance—predominantly merchant credit and bank overdrafts—though increasingly used by all three groups, still only contributed to the extent of two per cent, seven per cent, and six per cent to the flow of funds for the owner-occupiers, tenants, and transfers respectively. The use of hire purchase finance, however, played no part in this increased use of short-term credit and continued to account for only an insignificant amount of such advances.

The pattern of fund allocation within the various groups over the period of the study was largely determined by the extent of land-buying activity. In the case of the transfer group 30 per cent of all available funds was directed to the acquisition of farm property or its improvement while the acquisition of other business assets brought the total allocations to the farm sector to just over half of the total available funds. The remainder of the latter was directed outside the farm business in the form mainly of personal drawings and charges on income (accounting for 40 per cent of all available funds) although a small proportion (six per cent) took the form of transfers to off-farm investments and reserves.

Land purchase made much smaller demands on available funds in both the owner-occupier and tenant groups. As a consequence, for the owner-occupiers, investment in land, buildings and improvements, claiming one-sixth of total available funds, barely exceeded the level of investment in machinery and equipment while, for the tenants, investment

in farm property of a similar order of magnitude was surpassed by investment in machinery and equipment which attracted one-quarter of total available funds and formed the main area of farm investment.

Within the area of investment in farm improvements the pattern to emerge, in respect of both gross and net expenditure, was remarkably consistent for all three sub-groups with farm buildings claiming the largest single share (about three-fifths) of such investment. The increase which was recorded in the total valuation of tenant's assets other than machinery was dominated to an even greater extent by the rise in the value of livestock which accounted for more than four-fifths of the total increase.

For both the owner-occupiers and the tenants the concomitant of a smaller proportional importance of farm investment was the diversion of a rather greater share of available funds to areas outside the farm business than was evident in the case of the transfers. To this increased emphasis on diverted funds both personal expenditure and investment transfers contributed.

The increase in liquid assets which formed a relatively small part of the pattern of disposal of available funds for each of the three tenancy groups was found, on inspection, to consist generally of a pronounced growth in debtor balances which obscured the discernible evidence of decreasing fully liquid cash balances. These trends, viewed in association with the extended use of short-term bank and merchant credit, were indications of a worsening liquidity position which subsequent examination by means of ratios was to confirm. In the meantime further commentary on that position was afforded by the general decline in the number of farm businesses operating with positive bank balances and an increase not only in the number of those operating with overdrafts but also in the average size of those overdrafts.

More detailed analysis of funds flowing out of, or into, the farm business proper revealed that, although considerable yearly variation was evident, personal drawings constituted on average, for all groups, roughly one-half of total outflows over the study period with transfers to off-farm investments and reserves forming the second most important category among those distinguished for the owner-occupiers and tenants but with charges on income assuming the secondary position of importance for the transfers. For the tenant and transfer groups the growing relative importance of the interest component of charges on income within the general pattern of drawings was clearly associated with the increased volume of long-term borrowing at increased rates of interest undertaken by these two groups. For the owner-occupiers, however, with their more static borrowing record, interest charges formed a more consistent part of drawings. The incidence of tax liability within the pattern of drawings, however, revealed no discernible trends.

Among the destinations of funds invested outside the farm business deposit accounts with both the joint-stock and savings banks and with building societies featured prominently and, indeed, claimed the major share of such funds in the case of all groups. Government savings bonds and certificates also attracted a substantial proportion of these investment drawings in all groups as did the purchase of non-farm property for owner-

occupiers and tenants—expressly, in a number of cases, in anticipation of eventual retirement.

Among the funds introduced into the businesses during the study period by the farmers in a private capacity interest and withdrawals from bank and building society deposit accounts (reflecting the pattern of off-farm investment) and gifts of money were the two most prominently featured sources except in the transfer group where legacies (including the value of inherited property) were pre-eminent. Government and local authority stock was also of some importance for the tenants and transfers as was interest and repayments in respect of personal loans for the former of these two groups. Otherwise, funds were derived from a wide range of sources which were individually of small relative importance and which notably included quoted industrial and commercial shares. Moreover, the contributions from all sources, including those revealed by the aggregated funds for the whole ten-year period as being the more important, showed a high degree of annual variation.

Analysis designed to reveal the net movement of funds of a capital nature in relation to the flow of private funds of a current nature indicated that a net outflow of private capital funds accounted for roughly one-tenth of total net outflows for the owner-occupiers and the tenants while a net inflow of such funds, amounting to one-tenth of total net inflows, was discernible for the transfers.

Personal drawings, wife's wages and charges on income together contributed at least 90 per cent of total net outflows in all groups while legacies (including the value of inherited property) emerged as the largest single contributor in each of the groups to total net inflowing funds. Income from off-farm investments in the form of interest and rent also formed an important element of net inflows for the owner-occupiers accounting for nearly a third of the total but was much less important in the other two groups.

Net withdrawals from the farm business (that is, net outflows less net inflows) amounted on average in all groups to approximately £1,200 or £1,300 per farm per annum over the ten-year period.

The examination of the relationships existing between the main components of assets and liabilities by means of structural ratios re-emphasised the trends disclosed by earlier investigation of specific balance sheet items relating to the sample farms in the period from 1958/59 to 1967/68. The importance of fixed assets grew at the expense of both physical and liquid working assets in all groups as the trend to increasing land-ownership and the effect of rising land values were reinforced by increased investment in machinery and breeding livestock, but that growth was obviously most pronounced in the case of the transfer group where the scale and the timing of the occupation of land as owner resulted in a cumulative effect from both major changes in tenure arrangements and land appreciation.

The increase in long-term (that is, fixed) assets was accompanied, as would be usual, by an increase in the listed funding of those assets from long-term sources. In the case of the owner-occupiers, however, this increase in long-term funding assumed the form of an increase in net worth

as the effects of land appreciation accrued to the farmers concerned in circumstances where a net repayment of long-term borrowed funds was achieved. For the tenants and transfers increased long-term borrowing on an appreciable scale with less pronounced land valuation effects resulted in an overall decrease in net worth as a proportion of liabilities.

These variations in the extent and manner of the acquisition of freehold land, in the effect of the latter—through appreciation—on net worth and in long-term external fund requirements inevitably produced considerable variation between and within groups and over the series of years studied, in the apparent relative importance of current liabilities within the overall liability structure making it difficult to discern any well-defined trends and obscuring the effect on liquidity positions of the absolute increase in short-term borrowing known generally to have occurred. The significance of this latter trend was, therefore, more readily revealed when its relationship to trends in current and liquid assets was subsequently examined by the current and liquidity ratios.

First, however, the ratio of total assets to total external liabilities was investigated for each group for the ten-year period in order to discern trends in the long-term security of the businesses concerned and this revealed that while the owner-occupiers consolidated their positions by extending the cover provided by their total assets from nearly six times to more than ten times the volume of their external debts, the asset cover available to the external debts of the tenants declined from nearly five times to just under three times. Asset cover available to the external debts of the transfers declined rather less drastically from nearly seven times to just over five times this latter position representing a measure of recovery, as a result of land appreciation, from the less favourable plane to which their asset cover had been reduced by the heavy external financing of their change in status.

As far as the safety of the business in the short-term was concerned, none of the groups offered, at any time throughout the study period, grounds for complacency. Especially was this true in the case of the tenants and the transfers where the current ratio varied for the most part between parity and 1.7:1. The owner-occupiers displayed the least unfavourable record with a ratio which varied between 1.6:1 and an exceptional 2.7:1 but even these relationships, in circumstances where current assets are known to invariably include a substantial proportion of physical working assets, must inevitably imply a generally adverse liquidity position.

That latter was, in fact, amply confirmed by the series of annual liquidity ratios calculated for each group which, with only a few exceptions, varied between 0.6:1 and 0.2:1 indicating a widespread and persistent liquidity problem of critical proportions.

The ratios of net worth to long-term debt capital and net worth to current liabilities, which provide guidance to those contemplating the extension of further business credit, plainly demonstrate in relation to the sample farms the relative attractiveness of the owner-occupier group as far as the security of both long and short-term advances is concerned.

For the tenants, however, a contrasting picture is revealed with the amount of cover provided in aggregate by the proprietors' stake in their

businesses falling to levels which might be considered disturbing in view of the uncertainty which must always attach to the values eventually realised on liquidation. The record of the transfer group, with its use of long-term borrowed funds to assist in the acquisition of appreciating land assets, resulted, after the initial surge in the changeover to owner-occupier status, in the measure of cover afforded by net worth to long-term debt capital fluctuating between five and just over ten times although a comparison of the levels in the second and final years showed little overall change in a position roughly mid-way between these extremes.

In attempting to derive some measures relating to the return on capital the study was concerned more particularly with trends than with absolute levels. In the event a number of measures were examined which related an appropriate measure of profit to various measures of capital employed: to total assets, total tenant's assets, net assets and net tenant's assets. Measures of return to total and net assets exhibited a general downward trend in all groups although the level at which this trend manifested itself in the case of the tenant group was relatively higher than in the case of the other two groups where the restraining effect of the acknowledged low level of return to land was evident.

Comparison of trends in return related to tenant's assets only (both in total and net of current liabilities) revealed a marked divergence between the experience of the transfer group and the other two groups. Not only was the level of return generally greater in the case of the transfers but also the discernible trend in that rate of return was upward in contrast to the downward one evident in the case of the owner-occupiers and tenants, this better performance being attributed to the superior income record of the farmers who changed their status.

The calculated rate of return on net assets also serves, with a change in name only, as a measure of the return on total long-term capital invested in the business (that is, owner's equity capital plus long-term debt capital) which, in turn, can be dissected into its component parts consisting of the return, at pre-determined rates, on debt capital and a residual return to owner's capital. Within the sample studied average rates of interest on long-term borrowed capital at the outset of the study period were below the official bank rate in the case of all groups, ranging from about $1\frac{3}{4}$ per cent for tenants to $3\frac{3}{4}$ per cent for the transfers. However, while the three-year moving average rate of interest for the owner-occupiers remained virtually unchanged at just under $3\frac{1}{2}$ per cent, due to the comparatively small amount of new borrowing undertaken, the upward trend in the rate for the tenants and transfers reflected the higher rates charged for new borrowings by these groups to such an extent that, by the end of the period, the average cost of their debt capital was running at a level only slightly below bank rate.

With average rates of interest on debt capital for the sample generally below the calculated values of return on total long-term capital the residual rates of return on equity capital as computed for the study were invariably higher in all groups than rates of return on total long-term capital although the conservative capital gearing policies to which the sample businesses adhered (reflected by wide ratios of net worth to debt capital) effectively ensured that they were only slightly so.

Finally, a comparison of data from the study forming the basis of this report with material from an earlier financial study covering the period from 1949/50 to 1958/59 strongly indicated that the trend to land-ownership, which permeated many of the structural aspects of farm finance explored in the more recent study, really formed a continuation of an existing trend which, on the evidence available, extended back to the very early post-war years. This is reflected in the growing proportion of total assets held in the form of land which is revealed by data from the two samples, this proportion having almost doubled over the period spanned by the two investigations. The effect has been to bring about a decline in the relative importance in all other physical assets despite substantial increases in the latter in monetary terms. The most striking feature of the comparison, however, was the insignificant increase in absolute terms which occurred in the level of average cash balances which was a major factor in reducing the proportional importance of liquid assets by more than half.

Unfortunately, the casting of the earlier data prevented any comparison other than on an aggregate, "all farms" basis and, as a consequence of this, an apparent stability in the structure of farm business liabilities is conveyed. However, it would not seem unreasonable to assume that the differences in this structure observed within the more recent sample are capable of being extended back into the earlier period and that the "all farms" data relating to that period conceals a number of divergent and counteracting trends as both the extent of the need to employ external funding agencies to acquire a growing volume of physical assets and the prominence with which land featured as an appreciating asset varied from farm to farm.

The increases between 1949/50 and 1967/68 in the average level of long-term borrowing, merchant credit and bank overdrafts revealed by a comparison of the two samples are quite striking being of the order of eightfold, sixfold, and ninefold respectively. However, an increasing volume of production and inflationary effects on the value of money were clearly contributing factors to these trends and their implications are better assessed by means of some of the financial ratios described elsewhere in the report. Constructions of the current ratio and the liquidity ratio for the beginning and end of the period covered by the two studies revealed a drastic narrowing in both cases: the current ratio from 4.1:1 to 1.5:1 and the liquidity ratio from 1.5:1 to 0.5:1.

Examination of some of the changes in longer term balance sheet relationships which occurred over the same period suggest that, despite the growing effect of land appreciation, the amount of cover available to external liabilities, as variously measured by the relationship of total assets to total external liabilities, net worth to debt capital, and net worth to current liabilities, was still considerably less in 1967/68 than in 1949/50 though exhibiting a measure of recovery from the interim position of 1958/59.

An analysis of the flows of funds for the successive periods of the two studies revealed the presence of a marked degree of consistency but also a number of relatively small but significant differences. Thus a comparison of the sources of funds in the two periods indicated that the proportion of

total funds contributed by farm earnings fell from 79 per cent to 73 per cent and that, while the contribution of total borrowed funds remained the same at nine per cent, funds derived from the private resources of the farmers concerned increased in proportional importance from four to eight per cent. In both periods government grants for capital improvements were a relatively insignificant source of funds.

Disposals of available funds were remarkably similar with allocations in the earlier and later periods varying respectively, in their proportional importance, only to the following extent: allocations to land and machinery assets, 41 and 42 per cent; to normal valuation assets, ten and eight per cent; in the form of drawings, 42 and 44 per cent; and in the form of net transfers to off-farm investments and reserves, six and five per cent. Within these broad areas of allocation, however, there were certain changes in emphases. Thus, within the general area of investment in fixed assets land assumed precedence over machinery in attracting funds during the more recent period while, among drawings, an increase in the incidence of charges on income occurred at the expense of the relative importance of personal drawings.

The general impression left by an examination of the results of this study is inescapably that of the dominating importance of the trend towards the increased ownership of farmland in shaping the financial structure within which the productive processes of a farm business have, in recent years, necessarily functioned. The effects of this trend have transmitted themselves through the demands which it has created for external funds either in the form of credit or the accumulated reserves of the farmer; through the credit base which the acquisition of appreciating land has in turn provided not only for long-term borrowing but also for short-term advances with the repercussions of the latter on liquidity in a production situation where latent conditions of over-trading are commonly present; and through the additional charges on currently generated farm earnings to which the servicing costs of increased borrowing give rise in circumstances where these earnings have to satisfy a relatively inelastic family living requirement before investment options can be exercised. But whatever deductions may be drawn from them it is hoped that the facts derived from the study, as presented in this report, will at least serve to impart a measure of perspective to the growing body of material relating to farm assets and liabilities which is likely to become available in the future.

APPENDICES

APPENDIX A

TABLE (i)

CLASSIFICATION OF FARMERS BY AGE Comparable Sample of 72 Farm Businesses¹ 1958/59

<i>Age Group</i>	<i>No.</i>	<i>Per cent</i>
40 years and under ...	10	14
41-45 years of age ...	14	19
46-50 " " " ...	15	21
51-55 " " " ...	11	15
56-60 " " " ...	12	17
Over 60 " " " ...	10	14
Total	72	100

¹ Derived from Farm Management Survey records.

APPENDIX A (contd.)

TABLE (ii)

CROPPING AND STOCKING: SOUTH WESTERN PROVINCE

1958 and 1967

June Census

Cropping/Stocking	1958		1967		Percentage Change from 1958 to 1967
	Thousand acres	Per cent	Thousand acres	Per cent	
CROPPING					
Wheat	33.8	1.5	50.5	2.3	+ 49
Barley	155.3	7.0	322.2	14.4	+ 108
Oats	60.5	2.7	36.3	1.6	- 40
Mixed corn	86.9	3.9	31.9	1.4	- 63
Rye	0.7	**	0.4	**	- 43
Total Cereals	377.2	15.1	441.3	19.7	+ 31
Potatoes: Early	5.5	0.2	4.7	0.2	- 15
Second early and main	15.4	0.7	9.8	0.4	- 36
Sugar beet	2.1	0.1	0.5	**	- 76
Turnips, swedes, and fodder beet	24.4	1.0	15.1	0.7	- 38
Mangolds	14.0	0.6	3.8	0.2	- 73
Rape	14.8	0.7	8.6	0.4	- 42
Cabbage, kale, savoys, and kohlrabi	63.1	2.9	41.7	1.9	- 34
Vegetables for human consumption	11.8	0.5	9.9	0.4	- 16
Other crops	28.2	1.3	16.2	0.7	- 43
Bare fallow	10.3	0.5	12.5	0.5	+ 21
Total Tillage	526.8	23.6	564.1	25.1	+ 7
Temporary grass	608.2	27.4	595.7	26.6	- 2
Total Arable	1,135.0	51.0	1,159.8	51.7	+ 2
Permanent grass	1,091.2	49.0	1,083.6	48.3	- 1
Total Crops and Grass	2,226.2	100.0	2,243.4	100.0	+ 1
Rough Grazings	274.5	-	246.5	-	- 10
STOCKING					
	(Thousand head)				
Horses (agricultural)	7.9		n.a.		n.c.
Cattle	927.0		1,117.6		+ 21
Sheep	1,553.5		1,984.5		+ 28
Pigs	568.7		546.0		- 40
Poultry	6,389.4		7,357.1		+ 15

** Insignificant
n.a. Not available
n.c. Not calculable

APPENDIX B

BASES OF ASSET VALUATION

LAND, BUILDINGS AND IMPROVEMENTS. For the purposes of this study, land held in owner-occupation by the individual farm businesses comprising the sample was valued in accordance with the series of average land values determined from the returns of sales of agricultural land made to Local Valuation offices of the Inland Revenue for the period 31st March, 1945, to 31st March, 1970. These have been published by the Ministry of Agriculture, Fisheries and Food as an appended table (Table 3) to Press Notice No. 276, 'Prices of Agricultural Land in England and Wales', July, 1970.

Appropriate values from this series were applied to the acreages of farmland owned at the beginning of the individual business's accounting period relevant to the Farm Management Survey crop year 1958/59, to acreages owned at the end of the accounting period relevant to 1962/63 and to acreages owned at the end of the accounting period relevant to 1967/68.

The valuation, in this manner, of land owned at the beginning of the accounting period relevant to 1958/59 was deemed to absorb the remaining value of all owner-occupier's improvements undertaken before that date; but the value of landlord-type improvements undertaken by the occupiers of rented land prior to the commencement of the base period of accounting for the 1958/59 crop year was shown separately in the opening list of assets for that base period.

Land subsequently passing into the ownership of the farmer concerned and capital expenditure by owner-occupiers on buildings and improvements during the intervening periods between the three valuation dates have been initially included at cost in the listed assets of the balance sheet appropriate to the year in which the acquisition of the land or the expenditure took place and added either to the total value of farm property or to the accumulated value of owner-occupier's improvements brought forward from the previous accounting period. These augmented total values were, in turn, carried forward to successive years until absorbed by the values determined by the 1962/63 or 1967/68 valuation exercises.

In the event of the accrued balance sheet values for farm property and the separately held owner-occupier's improvements jointly proving, at the time of revaluation, to be in excess of the total value yielded by the application of standards adopted for the revaluation exercise, the higher figure was retained unless the special circumstances of the case decreed otherwise.

In the case of the purchase of land and buildings "cost" was deemed to be inclusive of all legal charges and of payments in respect of tithe redemption while, in the case of capital expenditure on improvements, it represents net cost after the deduction of any grants but excludes any charge for depreciation.

Where land, formerly occupied as a tenant, was purchased then the cost of this land was deemed to be its value for the purpose of its inclusion

in the balance sheet for the year of purchase where it was added to the value of any land already owned. Accumulated tenant's improvements in respect of such land were carried forward from the date of owner-occupation as owner-occupier's improvements until the next revaluation exercise.

Where the title to land, previously rented, was acquired by inheritance, however, the total value of such land was estimated by reference to the series of average land prices quoted above and that value, less the accumulated value of tenant's improvements to the year of inheritance, included in the balance sheet and added to the value of any land already owned. Accumulated tenant's improvements were again carried forward, from the date of inheritance, as owner-occupier's improvements until merged with the value of farm property brought forward and absorbed by the values determined by the revaluation exercise of 1962/63 or 1967/68.

Landlord-type improvements undertaken by tenants after the commencement of the accounting period covered by the study have been included at cost in the balance sheet for the year in which the expenditure was incurred and added to the total value of tenant's improvements brought forward from the previous year; these accumulated totals were then successively carried forward to following years until the conclusion of the study period where the final total has been allowed to remain as a separately listed item among the business assets.

MACHINERY AND EQUIPMENT. Valued at original cost (net of any investment grants) less accumulated depreciation to the date of valuation calculated on a reducing balance basis.

BREEDING LIVESTOCK. Breeding and production stock were valued at estimated market value.

GOODWILL. Goodwill acquired in this study on the purchase of retail milk-selling businesses has been valued at acquisition cost.

PHYSICAL WORKING ASSETS. Trading and non-breeding livestock (i.e. stock for rearing as replacements for breeding and production stock or for sale as store or fattened animals) were valued at market value less any costs of marketing still to be incurred. Stocks of harvested saleable crops, together with mature saleable crops in the ground, were valued at estimated market value less any costs still to be incurred. All other crops (i.e. immature saleable crops in the ground and fodder crops up to and including the stage of maturity) were valued at estimated cost to the date of valuation. Purchased materials in store (i.e. feedingstuffs, seeds, fertilisers, fuel, and sundry store items) have been valued at cost, net of any discounts or subsidies as appropriate.

APPENDIX C

TABLE iii(a)

ANALYSIS OF ASSETS AT ACCOUNTING YEAR END

All Farms (60)
1957/58 to 1967/68

<i>Nature of Asset</i>	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
	£	£	£	£	£	£	£	£	£	£	£
FIXED ASSETS											
Land, buildings and vested improvements	212,564	253,768	301,288	319,012	335,144	530,708	561,730	608,960	634,407	685,647	994,964
Improvements undertaken as tenant ...	17,191	18,363	18,702	17,941	18,368	20,637	22,497	22,004	24,772	25,556	27,965
Machinery and equipment ...	102,874	116,127	121,965	122,913	133,331	139,393	145,625	150,242	154,986	152,060	153,788
Breeding livestock ...	104,837	108,715	110,956	115,210	121,335	126,916	125,975	132,288	154,730	165,102	175,671
Intangible assets ...	—	—	—	—	—	—	—	300	330	330	390
Total Fixed Assets	437,466	496,973	552,911	575,076	608,178	817,654	855,827	913,794	969,225	1,028,695	1,352,778
CURRENT ASSETS											
Stock valuation ...	102,948	111,011	118,121	117,491	122,882	132,430	138,952	151,905	160,788	172,853	169,130
Debtors, short-term loans and prepayments ...	23,342	24,511	24,370	24,523	28,348	29,372	32,243	31,208	32,784	38,627	43,819
Cash at bank and in hand ...	32,230	24,346	21,683	27,579	23,739	23,935	26,849	20,732	28,159	19,034	30,232
Total Current Assets	158,520	159,868	164,174	169,593	174,969	185,737	198,044	203,845	221,731	230,514	243,181
TOTAL ASSETS	595,986	656,841	717,085	744,669	783,147	1,003,391	1,053,871	1,117,639	1,190,956	1,259,209	1,595,959

APPENDIX C (contd.)

TABLE iii(b)

ANALYSIS OF ASSETS AT ACCOUNTING YEAR END
Wholly and Mainly Owner-occupiers (25)
1957/58 to 1967/68

<i>Nature of Asset</i>	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
	£	£	£	£	£	£	£	£	£	£	£
FIXED ASSETS											
Land, buildings and vested improvements	193,386	210,265	218,848	225,231	233,438	358,451	378,900	392,980	400,680	406,795	587,722
Improvements undertaken as tenant	—	—	—	—	—	—	—	—	—	—	—
Machinery and equipment	41,579	49,234	50,064	48,637	51,563	53,286	56,586	59,771	61,502	58,967	57,547
Breeding livestock	43,301	46,177	46,877	47,362	49,303	50,249	47,795	51,457	58,205	63,034	69,794
Intangible assets	—	—	—	—	—	—	—	—	—	—	—
Total Fixed Assets	278,266	305,676	315,789	321,230	334,304	461,986	483,281	504,208	520,387	528,796	715,063
CURRENT ASSETS											
Stock valuation	44,655	45,184	48,602	44,953	47,177	53,144	55,165	53,769	60,671	63,638	62,985
Debtors, short-term loans and pre-payments	9,671	9,500	11,512	9,496	11,127	12,438	11,686	12,751	13,768	15,508	15,682
Cash at bank and in hand	14,890	9,695	8,489	12,719	10,779	9,166	12,805	10,171	13,591	11,002	13,001
Total Current Assets	69,216	64,379	68,603	67,168	69,083	74,748	79,656	76,691	88,030	90,148	91,668
TOTAL ASSETS	347,482	370,055	384,392	388,398	403,387	536,734	562,937	580,899	608,417	618,944	806,731

APPENDIX C (contd.)

TABLE iii(c)

ANALYSIS OF ASSETS AT ACCOUNTING YEAR END

Wholly and Mainly Tenants (22)

1957/58 to 1967/68

<i>Nature of Asset</i>	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
	£	£	£	£	£	£	£	£	£	£	£
FIXED ASSETS											
Land, buildings and vested improvements	11,696	13,671	28,717	28,987	26,847	36,446	36,489	30,489	42,126	65,802	90,803
Improvements undertaken as tenant	9,780	11,439	12,965	12,740	13,297	15,158	17,433	21,145	23,913	25,556	27,965
Machinery and equipment	40,662	44,373	48,750	50,332	55,798	58,652	62,323	63,133	66,003	64,325	65,032
Breeding livestock	40,130	39,661	40,862	43,610	45,765	49,668	49,893	51,003	63,147	66,412	68,820
Intangible assets	—	—	—	—	—	—	—	—	—	—	—
Total Fixed Assets	102,268	109,144	131,294	135,669	141,707	159,924	166,138	165,770	195,189	222,095	252,620
CURRENT ASSETS											
Stock valuation	31,853	39,103	39,682	40,131	42,794	43,019	48,470	57,106	54,452	61,172	59,347
Debtors, short-term loans and pre-payments	6,952	7,985	7,200	8,673	10,510	9,122	11,539	11,143	11,111	12,873	16,068
Cash at bank and in hand	10,361	8,336	8,297	9,202	7,525	9,206	9,161	7,256	8,095	5,604	5,125
Total Current Assets	49,166	55,424	55,179	58,006	60,829	61,347	69,170	75,505	73,658	79,649	80,540
TOTAL ASSETS	151,434	164,568	186,473	193,675	202,536	221,271	235,308	241,275	268,847	301,744	333,160

APPENDIX C (contd.)

TABLE iii(d)

ANALYSIS OF ASSETS AT ACCOUNTING YEAR END

Transfers (13)
1957/58 to 1967/68

<i>Nature of Asset</i>	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
	£	£	£	£	£	£	£	£	£	£	£
FIXED ASSETS											
Land, buildings and vested improvements	7,482	29,832	53,723	64,794	74,859	135,811	146,341	185,491	191,601	213,050	316,439
Improvements undertaken as tenant	7,411	6,924	5,737	5,201	5,071	5,479	5,064	859	859	—	—
Machinery and equipment	20,633	22,520	23,151	23,944	25,970	27,455	26,716	27,338	27,481	28,768	31,209
Breeding livestock	21,406	22,877	23,217	24,238	26,267	26,999	28,287	29,828	33,378	35,656	37,057
Intangible assets	—	—	—	—	—	—	—	300	330	330	390
Total Fixed Assets	56,932	82,153	105,828	118,177	132,167	195,744	206,408	243,816	253,649	277,804	385,095
CURRENT ASSETS											
Stock valuation	26,440	26,724	29,837	32,407	32,911	36,267	35,317	41,030	45,665	48,043	46,798
Debtors, short-term loans and pre-payments	6,719	7,026	5,658	6,354	6,711	7,812	9,018	7,314	7,905	10,246	12,069
Cash at bank and in hand	6,979	6,315	4,897	5,658	5,435	5,563	4,883	3,305	6,473	2,428	12,106
Total Current Assets	40,138	40,065	40,392	44,419	45,057	49,642	49,218	51,649	60,043	60,717	70,973
TOTAL ASSETS	97,070	122,218	146,220	162,596	177,224	245,386	255,626	295,465	313,692	338,521	456,068

APPENDIX D

TABLE iv(a)

ANALYSIS OF LIABILITIES AT ACCOUNTING YEAR END

All Farms (60)
1957/58 to 1967/68

<i>Nature of Liability</i>	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
NET WORTH	£ 490,130	£ 513,756	£ 544,695	£ 567,921	£ 598,110	£ 802,599	£ 834,018	£ 881,459	£ 942,704	£ 975,531	£ 1,316,813
LONG AND MEDIUM- TERM LOANS											
Institutional	2,858	2,858	7,358	7,847	8,485	8,485	20,585	20,369	20,774	36,984	36,447
Bank	—	733	613	5,040	4,000	4,000	5,275	8,772	7,825	13,844	11,960
Family	22,999	27,988	27,555	29,522	29,260	32,515	35,198	35,197	40,568	42,349	44,709
Other private	12,500	20,090	22,875	17,875	18,270	18,020	11,645	11,645	14,945	21,645	20,545
Other... ..	200	100	—	—	—	122	205	714	808	718	1,127
Total Long and Medium-term Loans	38,557	51,769	58,401	60,284	60,015	63,142	72,908	76,697	84,920	115,540	114,788
CURRENT LIABILITIES											
Hire purchase	677	1,817	1,313	839	1,556	1,818	3,799	1,994	1,140	1,358	1,310
Accumulated charges	640	1,400	2,027	3,078	4,927	7,331	9,074	8,144	9,488	9,970	11,259
Sundry creditors	41,373	46,578	48,076	53,758	56,454	54,829	58,991	61,092	66,714	68,945	72,413
Bank overdrafts	24,009	41,521	61,923	58,539	62,085	72,656	74,381	85,478	85,990	86,865	79,376
Other... ..	600	—	650	250	—	1,016	700	2,775	—	1,000	—
Total Current Liabilities	67,299	91,316	113,989	116,464	125,022	137,650	146,945	159,483	163,332	168,138	164,358
TOTAL LIABILITIES	595,986	656,841	717,085	744,669	783,147	1,003,391	1,053,871	1,117,639	1,190,956	1,259,209	1,595,959

APPENDIX D (contd.)

TABLE iv(b)

ANALYSIS OF LIABILITIES AT ACCOUNTING YEAR END

Wholly and Mainly Owner-occupiers (25)

1957/58 to 1967/68

<i>Nature of Liability</i>	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
	£	£	£	£	£	£	£	£	£	£	£
NET WORTH	286,708	299,873	307,481	316,203	329,639	465,575	486,571	498,237	529,429	540,372	729,073
LONG AND MEDIUM-TERM LOANS											
Institutional	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,933	2,933	2,933
Bank	—	733	613	5,040	4,000	4,000	5,275	4,572	3,894	3,202	2,741
Family	19,931	21,720	17,537	17,504	17,242	16,527	18,626	18,692	18,572	18,472	18,322
Other private	12,000	12,000	14,000	9,000	9,000	8,000	8,000	8,000	8,000	8,000	7,000
Other... ..	200	100	—	—	—	—	95	246	224	203	682
Total Long and Medium-term Loans	34,889	37,311	34,908	34,302	33,000	31,285	34,754	34,268	33,623	32,810	31,678
CURRENT LIABILITIES											
Hire purchase	—	—	312	—	—	138	—	—	—	82	—
Accumulated charges	50	294	536	1,676	1,899	2,283	2,051	1,903	1,589	1,288	472
Sundry creditors	17,674	19,093	17,647	17,893	17,511	17,657	19,433	18,484	20,786	20,277	21,531
Bank overdrafts	8,161	13,484	23,508	18,324	21,338	19,796	20,128	28,007	22,990	24,115	23,977
Other... ..	—	—	—	—	—	—	—	—	—	—	—
Total Current Liabilities	25,885	32,871	42,003	37,893	40,748	39,874	41,612	48,394	45,365	45,762	45,980
TOTAL LIABILITIES	347,482	370,055	384,392	388,398	403,387	536,734	562,937	580,899	608,417	618,944	806,731

APPENDIX D (contd.)

TABLE iv(c)

ANALYSIS OF LIABILITIES AT ACCOUNTING YEAR END

Wholly and Mainly Tenants (22)

1957/58 to 1967/68

<i>Nature of Liability</i>	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
NET WORTH	£ 120,419	£ 129,293	£ 134,208	£ 139,981	£ 143,252	£ 146,467	£ 155,254	£ 163,483	£ 176,383	£ 190,498	£ 218,401
LONG AND MEDIUM-TERM LOANS											
Institutional	100	100	100	100	100	100	100	100	529	15,949	15,632
Bank	—	—	—	—	—	—	—	—	—	1,000	1,000
Family	1,850	1,850	6,600	6,600	6,600	12,000	12,084	12,472	17,663	18,350	18,550
Other private	500	590	500	500	895	895	895	895	895	2,795	2,795
Other... ..	—	—	—	—	—	122	110	202	178	155	131
Total Long and Medium-term Loans	2,450	2,540	7,200	7,200	7,595	13,117	13,189	13,669	19,265	38,249	38,108
CURRENT LIABILITIES											
Hire purchase	477	1,817	1,001	839	1,225	1,525	3,404	1,857	1,140	770	1,271
Accumulated charges	579	945	1,168	1,200	2,354	5,048	6,649	6,041	7,490	8,362	9,850
Sundry creditors	14,654	18,413	21,115	23,902	28,338	25,303	26,812	29,818	29,710	31,739	30,511
Bank overdraft	12,255	11,560	21,131	20,303	19,772	29,811	29,300	26,407	34,859	32,126	35,019
Other... ..	600	—	650	250	—	—	700	—	—	—	—
Total Current Liabilities ...	28,565	32,735	45,065	46,494	51,689	61,687	66,865	64,123	73,199	72,997	76,651
TOTAL LIABILITIES	151,434	164,568	186,473	193,675	202,536	221,271	235,308	241,275	268,847	301,744	333,160

APPENDIX D (contd.)

TABLE iv(d)

ANALYSIS OF LIABILITIES AT ACCOUNTING YEAR END

Transfers (13)
1957/58 to 1967/68

<i>Nature of Liability</i>	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
	£	£	£	£	£	£	£	£	£	£	£
NET WORTH	83,003	84,590	103,006	111,737	125,219	190,557	192,193	219,739	236,892	244,661	369,339
LONG AND MEDIUM-TERM LOANS ...											
Institutional	—	—	4,500	4,989	5,627	5,627	17,727	17,511	17,312	18,102	17,882
Bank	—	—	—	—	—	—	—	4,200	3,931	9,642	8,219
Family	1,218	4,418	3,418	5,418	5,418	3,988	4,488	4,033	4,333	5,527	7,837
Other private	—	7,500	8,375	8,375	8,375	9,125	2,750	2,750	6,050	10,850	10,750
Other... ..	—	—	—	—	—	—	—	266	406	360	314
Total Long and Medium-term Loans	1,218	11,918	16,293	18,782	19,420	18,740	24,965	28,760	32,032	44,481	45,002
CURRENT LIABILITIES ...											
Hire purchase	200	—	—	—	331	155	395	137	—	506	39
Accumulated charges	11	161	323	202	674	—	374	200	409	320	937
Sundry creditors	9,045	9,072	9,314	11,963	10,605	11,869	12,746	12,790	16,218	16,929	20,371
Bank overdrafts	3,593	16,477	17,284	19,912	20,975	23,049	24,953	31,064	28,141	30,624	20,380
Other... ..	—	—	—	—	—	1,016	—	2,775	—	1,000	—
Total Current Liabilities ...	12,849	25,710	26,921	32,077	32,585	36,089	38,468	46,966	44,768	49,379	41,727
TOTAL LIABILITIES	97,070	122,218	146,220	162,596	177,224	245,386	255,626	295,465	313,692	338,521	456,068

APPENDIX E

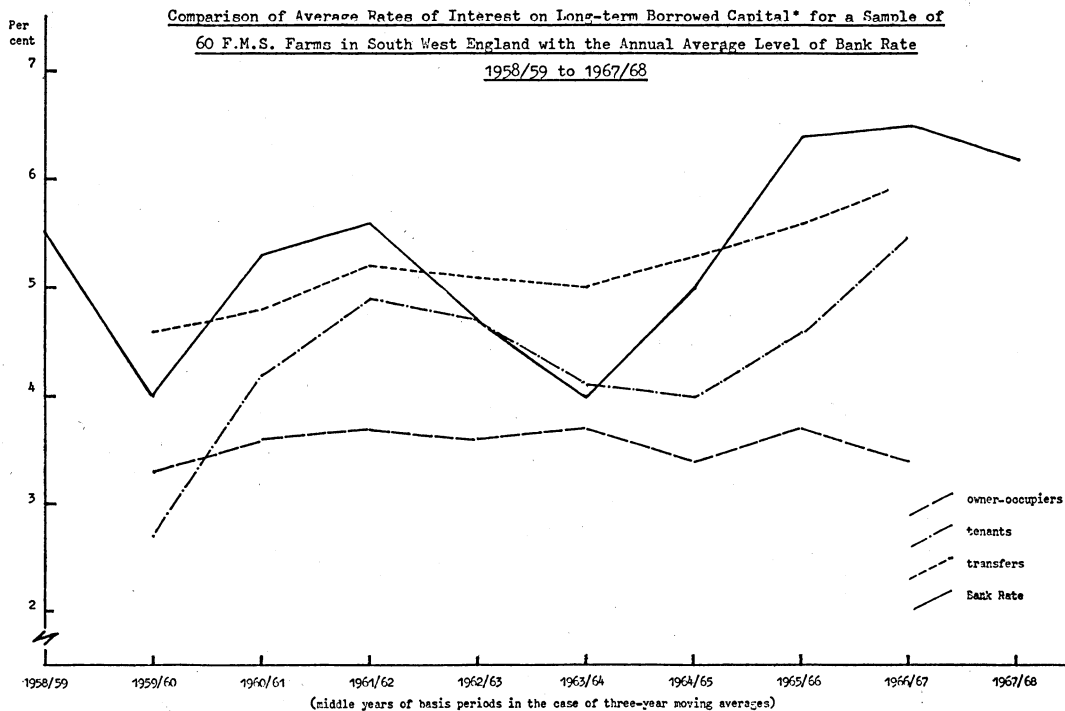
TABLE (v)

THE EFFECT OF CAPITAL GEARING ON THE RATE OF RETURN ON OWNER'S CAPITAL

	<i>Situation I (low gearing)</i>			<i>Situation II (high gearing)</i>		
Capital Structure:	£			£		
Long-term debt capital (A) ...	4,000			12,000		
Owner's capital (B)	16,000			8,000		
Total long-term capital	<u>20,000</u>			<u>20,000</u>		
Gearing percentage $\left(\frac{A}{B} \times 100\right)$...	25%			150%		
	<i>Assumption</i>			<i>Assumption</i>		
	(a)	(b)	(c)	(a)	(b)	(c)
Assumed rate of return on total long-term capital... ..	10%	15%	5%	10%	15%	5%
	£	£	£	£	£	£
Profit before deduction of interest charges	2,000	3,000	1,000	2,000	3,000	1,000
Deduct interest on borrowed capital at 6%	240	240	240	720	720	720
Net profit to owner	<u>1,760</u>	<u>2,760</u>	<u>760</u>	<u>1,280</u>	<u>2,280</u>	<u>280</u>
Percentage return on owner's capital	11.0	17.25	4.75	16.0	28.5	3.5

APPENDIX F

Fig. 1

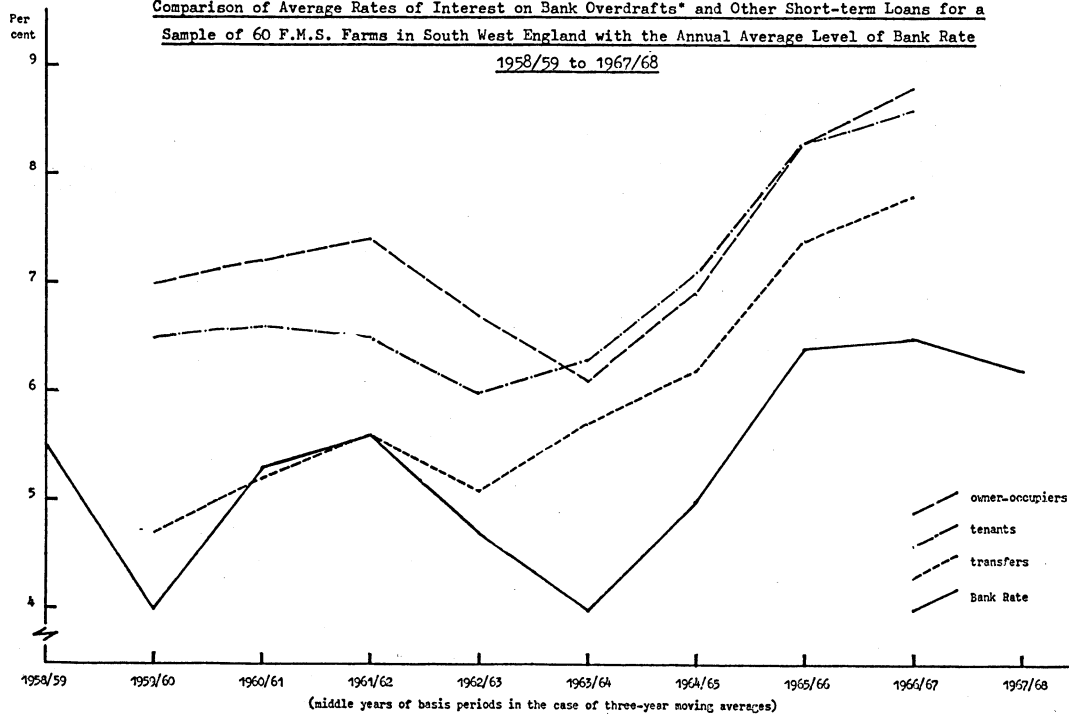


* Calculated as three-year moving averages of annual long-term interest

APPENDIX F

Fig. 2

Comparison of Average Rates of Interest on Bank Overdrafts* and Other Short-term Loans for a Sample of 60 F.M.S. Farms in South West England with the Annual Average Level of Bank Rate 1958/59 to 1967/68



* Calculated as three-year moving averages based on annual estimates of bank overdraft interest

APPENDIX G

GLOSSARY

GROSS OUTPUT is total farm receipts (excluding the sale of any capital items) less the value of purchases of livestock (and livestock products for re-sale) adjusted for valuation changes where appropriate.

COSTS is total farm expenditure (excluding any payments in respect of wife's wages and for capital items) less purchases of livestock (and livestock products for re-sale) adjusted for valuation difference where appropriate. For owner-occupiers costs include an estimated rental value for the farm property and improvements vested in it; for tenants, they will include an imputed rental charge in respect of improvements carried out by the tenant which are of a kind normally undertaken by a landlord. Costs do not include any payments of interest on borrowed capital.

NET FARM INCOME is the excess of gross output over costs and represents the reward to the farmer and his wife for their labour, management and capital investment.

FARM EARNINGS are defined as Net Farm Income adjusted for certain imputed items which may have been charged or credited in arriving at the latter measure, viz. rental value, interest on tenant's improvements, the value of board and lodging and unpaid farm labour and machinery depreciation. It is the concept used in this report as the measure of disposable farm profit.

ASSETS include all items owned by the farm business which have a realisable money value and all claims which the farm business has on others in respect of items with a realisable money value.

FIXED ASSETS are assets which are not used up in the course of a single production period and, therefore, cannot be realised without impairment of the existing productive capacity of the business. They represent the commitment of business funds in the longer term to the means of production. They include, in the context of this report, farm property (land and buildings) and all improvements thereto, breeding and production livestock, machinery and equipment and—as an intangible asset the value of which is realised only on the sale of the sector of the business concerned—goodwill.

CURRENT ASSETS are assets which circulate within the business in the course of the production process. They consist of physical working assets and liquid assets.

PHYSICAL WORKING ASSETS comprise the raw materials and stock-in-trade of the business which are intended for conversion into cash within the normal production period. For the purposes of this report they consist of trading livestock, harvested and growing crops, stocks of livestock products and items of deadstock (excluding machinery).

LIQUID ASSETS are those which require little or no conversion in order to provide their owner with an immediate and unrestricted choice in the manner of their future employment within the business. They consist of cash balances held at the bank on current account or in hand and of

“near-cash” assets whose conversion into fully liquid form is expected within a short period of time (for example, sundry debtors and short-term loans). It is also usual to include prepayments in this category of assets.

TOTAL ASSETS comprise Fixed Assets plus Current Assets.

NET ASSETS are Total Assets less Current Liabilities (for a definition of the latter, see below).

TOTAL TENANT'S ASSETS comprise Total Assets less the value of owner-occupier's land, buildings and improvements and of tenant's improvements.

NET TENANT'S ASSETS are Total Tenant's Assets less Current Liabilities.

LIABILITIES represent the value of claims which the various suppliers of funds to a business have on its assets.

EXTERNAL LIABILITIES are those claims upon the assets of a business which may be made by persons or bodies other than its owner or owners. Such claims are represented by long-term loans and mortgages, medium and short-term loans, and the sundry creditors of the business.

NET WORTH (OWNER'S CAPITAL OR EQUITY) is the residual claim which the owners of a business have against its assets after all external claims against it have been met. The Net Worth of a business as depicted by a Balance Sheet is directly affected by the manner in which its assets have been valued in that Balance Sheet; its true Net Worth, if and when realised by the liquidation of the business, may either exceed or fall below the depicted Balance Sheet value by the net amount by which the realised values of assets exceed or fall below their listed values. Similarly, either the disposal or the revaluation of individual assets at sums in excess of or below their total balance sheet value will require corresponding adjustments to be made to the depicted Net Worth of the business.

In addition to corrective adjustments to Net Worth arising from realised or imputed deviations from listed asset values, changes will also occur in the owner's residual claim on the business over the accounting period to which the Balance Sheet relates as Net Worth is augmented by business earnings and personal funds introduced (excluding any loans), and depleted by business losses, interest charges, personal drawings, taxes on income and transfers to off-farm investments.

LONG AND MEDIUM-TERM LOANS (DEBT CAPITAL) consist of loans, mortgages and other debts which, under normal circumstances, are not subject to early recall. Long-term loans are defined herein as those repayable over periods of ten or more years and medium-term loans as those repayable over periods of more than one year but less than ten (excluding advances under hire purchase arrangements which have been included with Current Liabilities). Interest payments on the borrowed capital represented by such loans and mortgages may be at fixed or varying rates or, as in the case of some private arrangements, free of interest charges. Arrangements for the repayment of principal may be periodic (monthly, half-yearly, or annually) or in a lump sum at the conclusion of the term of the advance. Where interest and repayment of principal are

payable in respect of such loans and mortgages then such payments constitute a charge upon the income of the borrower.

TOTAL LONG-TERM CAPITAL comprises Debt Capital plus Equity Capital (Net Worth).

CURRENT LIABILITIES are claims upon the assets of a business which, in contrast to debt capital, can be anticipated in the shorter term: that is, within the span of a normal production or accounting period. They will include sundry business creditors and accrued charges, bank overdrafts and other short-term loans, and also outstanding hire purchase debt.

TOTAL LIABILITIES comprise Current Liabilities, Debt Capital and Net Worth.

WORKING CAPITAL is Current Assets less Current Liabilities.

CAPITAL GRANTS comprise all grants which relate to expenditure of a capital nature (that is, to the acquisition of fixed assets). They include grants in respect of schemes of improvement to farm land and buildings (for example, under the Farm Improvement Scheme), grants made by local authorities towards the cost of improving farmhouses and farm cottages, and Ministry grants on tractors and other self-propelled agricultural machinery which were available during the last two years of the study period.

FUNDS INTRODUCED BY FARMER are funds injected into the business by the farmer or his wife which did not stem from the productive process of the business, from the sale of its fixed assets or from grants thereon and which did not subsequently constitute a liability to the business. They comprise, therefore, all *personal* funds introduced by the farmer or his wife and include all income of a non-farming nature, the realisation of non-farming assets (including maturing and surrendered assurance policies) and windfall receipts in the form of legacies, gifts and prizes.

TRANSFERS TO OFF-FARM INVESTMENTS AND RESERVES. These comprise all withdrawals of funds from the farm business other than drawings for personal consumption, charges on income (interest and tax payments), life assurance premiums and wife's wages. They include all funds directed to the range of investment outlets which is normally open to the private investor and include personal loans and investment in non-farm property.

RETURN ON TOTAL ASSETS expresses, as a percentage, the relationship of Net Farm Income, adjusted for Rental Value and Interest on Tenant's Improvements, to Total Assets.

RETURN ON NET TOTAL ASSETS expresses Net Farm Income, adjusted for Rental Value and Interest on Tenant's Improvements, as a percentage of Total Assets less Current Liabilities.

RETURN ON TOTAL TENANT'S ASSETS expresses Net Farm Income as a percentage of Total Tenant's Assets.

RETURN ON NET TENANT'S ASSETS expresses Net Farm Income as a percentage of Total Tenant's Assets less Current Liabilities.

RETURN ON TOTAL LONG-TERM CAPITAL expresses Net Farm Income, less interest on bank overdrafts and other short-term loans, as a percentage of Total Long-term Capital.

RATE OF INTEREST ON DEBT CAPITAL is the average rate of interest paid on long and medium-term loans and mortgages (including interest-free loans).

RETURN ON EQUITY CAPITAL expresses Net Farm Income, less all interest payments in respect of borrowed capital, as a percentage of Net Worth.

