Some Problems in the Estimation of Personal Savings and Investment[1]

Recent work in the field of national income and expenditure statistics in this country has been concentrated principally in improving and elaborating the descriptions of transactions in goods and services—of the production and use of real resources. A need is now felt for much more intensive study of the transactions in financial assets —essentially of the processes of lending and borrowing, in various forms and between the various parts of the economy. This study of " financial flows " has been developed on a considerable scale in some other countries, for example, in the United States and in the Netherlands. It can be linked very closely with the general structure of national accounting used for existing statistics of national income and expenditure. It can play a most important part in the analysis of the many channels through which the money savings of the various parts of the national economy contribute to the growth of the nation's productive assets.

The present paper is no more than a preliminary attempt to set out some of the material which seems to be relevant to a study from this point of view of *personal* savings and investment ; and to list some of the statistical problems which at present remain unsolved. This is " work in progress " in a region of which the statistical frontier is wide open ; the paper may suggest to you forest areas and unmapped rivers which are capable and worthy of exploration.

TABLE I.

The Financing of Investment.

(£ million)

		Persons	Companies	Public Corporations	Central Government	Local authorities	Residual error	Total
1. Saving	1938	241	290*	..	—150	75	—	456
	1948	59	880	59	520	71	9	1,598
	1949	95	935	84	581	77	—25	1,747
	1950	102	1,219	118	662	79	24	2,204
	1951	237	1,209	142	593	68	25	2,274
	1952	706	1,011	144	349	81	—12	2,279
	1953	870	1,207	163	173	118	59	2,590
2. *plus* Additions to tax and dividend reserves	1938	5	..	..	—	—	—	— 6
	1948	1	161	19	—	—	—	181
	1949	44	—21	5	—	—	—	28
	1950	66	110	8	—	—	—	184
	1951	62	430	29	—	—	—	521
	1952	— 84	52	38	—	—	—	6
	1953	— 31	62	17	—	—	—	48

* Includes Public Corporations.

[1] A paper read before the Manchester Statistical Society, November 10th, 1954, and printed in the REVIEW by kind permission of the Society.

TABLE I—*continued.*

		Persons	Companies	Public Corporations	Central Government	Local authorities	Residual error	Total
3. *plus* Capital taxes and transfers (net receipts)	1938	— 78	..	..	..	..	—	—
	1948	— 99	73	4	227	29	—	234
	1949	—149	58	42	194	44	—	189
	1950	— 93	43	3	197	18	—	168
	1951	—126	39	5	147	14	—	79
	1952	—104	37	5	86	12	—	36
	1953	—117	47	6	91	19	—	46
4. *less* Fixed domestic capital formation (gross)	1938	—196	..	..	..	..	—	— 600
	1948	—216	—509	—180	—105	—386	—	— 1,396
	1949	—236	—546	—264	—111	—387	—	— 1,544
	1950	—241	—617	—289	—123	—412	—	— 1,682
	1951	—268	—622	—361	—152	—463	—	— 1,866
	1952	—291	—628	—407	—197	—543	—	— 2,066
	1953	—356	—660	—491	—212	—614	—	— 2,333
5. *less* Increase in value of stocks (including stock appreciation)	1938	..	..	..	..	—	—	80
	1948	— 94	—390	— 32	38	—	—	— 478
	1949	— 69	—189	— 33	56	—	—	— 235
	1950	—104	—410	— 14	94	—	—	— 434
	1951	—195	—903	— 84	—168	—	—	— 1,350
	1952	— 3	90	— 43	— 44	—	—	—
	1953	— 60	— 67	16	— 15	—	—	— 126
6. *equals* Net acquisition of financial assets *plus* net overseas investment	1938	(— 28)	..	..	..	..	—	— 70
	1948	—349	215	—130	680	—286	9	139
	1949	—315	237	—166	720	—266	— 25	185
	1950	—270	345	—174	830	—315	24	440
	1951	—290	153	—269	420	—381	25	— 342
	1952	224	562	—263	194	—450	— 12	255
	1953	306	589	—289	37	—477	59	225

SOURCE : Summarised from *National Income and Expenditure, 1946 to 1953*, Table 42. (1938 figures from *Annual Abstract of Statistics, No.* 91, but no split by sectors available except for item 1.)

NOTES : *Item* 1 represents saving before providing for depreciation and stock appreciation.
Item 3 is the sum of taxes on capital (death duties and the special contribution), domestic capital transfers (such as war damage compensation by Central Government to persons or companies, capital grants of Central Government to local authorities) and international capital transfers (chiefly receipts by Central Government of E.R.P. grants and other capital gifts from abroad and payments abroad by Central Government such as E.R.P. counterpart payments and revaluation payments after devaluation).
Item 5 includes stock appreciation. The estimated amounts in total are :

	£ million
1948	325
1949	200
1950	650
1951	750
1952	— 50
1953	— 75

For the split of stock appreciation by sectors, see the Blue Book, 1954, Table 42.

The General Pattern of Savings and Investment

It may be useful to begin by setting out the basic statistics of total national saving and investment. These form the background against which the significance of personal saving can be appreciated. The figures are summarised in Table I, which reproduces in somewhat condensed form Table 42 of the 1954 Blue Book on national income and expenditure.[1]

We are concerned fundamentally with the processes of saving, capital formation, borrowing and lending. The starting point, for the existing statistics, is the series of figures showing the savings of each sector of the economy. As derived in the national accounts of the United Kingdom (and of most other countries), these figures represent the excess, for each sector, of estimated gross income over estimated current expenditure (including as expenditure provision for tax). The second set of data are those relating to capital formation—a term used, to allow a wider meaning for the term " investment," to describe investment in fixed assets and in stocks. Accepting the estimates of saving and capital formation, we can derive for each sector a further residual estimate : the excess of saving over capital formation by the sector, which represents broadly the net amount of its investment in non-physical, or financial assets. The latter consists essentially of the sector's lending to, or borrowing from the rest of the economy, including the outside world. The interest in this calculation lies in the distinction which it reveals between those parts of the economy whose real capital formation absorbs savings from elsewhere, and those parts of the economy whose savings contribute to the capital formation of the rest.

It will be seen that, throughout, savings and fixed capital formation are expressed " gross "—before any provision is made for depreciation. For economic analysis, it is of great importance to know how much investment represents simply the replacement of existing assets, and how much represents net expansion in the total stock of assets. From the financial point of view, it is important to know how much saving is required to offset the current use of existing assets and to replace them (or to build up a fund for replacing them in future). But the only appropriate measure of depreciation from these points of view would be a measure of the cost of depreciation at replacement prices (in the year of account under discussion). The existing statistics, derived from business or fiscal accounting, are almost wholly confined to measures of depreciation based on original cost.

The general conclusions to be drawn from the table are familiar enough. The main feature is the very clear division in the post-war economy between the sectors which on balance borrow and those which on balance lend. Throughout the period, the public corporations and the local authorities have been consistently very heavy borrowers. Their savings in item 1 (that is, the surpluses from their income accounts) have been far from sufficient to finance their physical capital formation (items 4 and 5) ; hence the columns of negative quantities in item 6 under these two sectors show the consequent continuous accumulation of financial liabilities. The Central Government, on the other hand, has been a consistent lender although on a diminishing scale, till in 1953 the amount of net lending was very small. The reason is that the surpluses on current account (which are not the same thing as the " above the line " surpluses in the budget statements) have been much greater than the comparatively small amounts of direct investment in fixed assets and stocks. On balance, the three public sectors were net lenders to the rest of the economy in 1948 to 1950, but net borrowers in 1951 to 1953.

The trend in the two private sectors is less easy to interpret. The personal sector

[1] *National Income and Expenditure, 1946 to 1953.* H.M.S.O., August, 1954 (referred to hereafter as " Blue Book, 1954 ").

appears on balance a net borrower on a large scale until 1952 and 1953, when the rate of personal saving was substantially increased. The company sector has been throughout a net lender : the business savings of companies (i.e. undistributed profits after payments of tax) have been in aggregate more than enough, in every year, to finance aggregate investment by companies in real assets (and stock appreciation). This surplus, however, was small in 1951, when reported profits were at a peak but reflected to a great extent the effect of the post-Korean price increase on stock values. In 1951, and also in 1948, the " net lending " of companies was exceeded by their additions to tax reserves (item 2) ; that is to say, the increase in financial assets was exceeded by the liability to future tax payments and presumably consisted of tax reserve certificates or other assets against which there was a specific short-term liability. But in 1952 and in 1953 the increase in financial assets is much more significant.

Finally, the total increase in the nation's financial assets represents overseas investment, and was positive in each year except 1951. This overseas investment is not the current surplus on the balance of payments : it is that surplus (or deficit) plus all gifts and other transfers from abroad whether recorded as on current account (as defence aid is) or on capital account (as E.R.P. aid was).

There is at present no way of determining the net overseas investment by each separate sector of the economy. The crucial item 6 of Table I thus necessarily includes the overseas investment of each sector, although part of this takes the form of investment in physical assets (whether fixed assets or stocks). It may be worth pointing out that an official estimate has recently been given of the amount of fresh *long-term* investment abroad included in these figures ; the estimate shows £200 million a year of such investment (in both physical and financial assets) during the years 1946 to 1953. It is impossible to say how much of this should be attributed to each sector, but the figure has an important bearing on the interpretation of the change in financial assets of the company sector.

The remarkable changes in the place of personal saving are among the outstanding features of this general picture. Although personal saving in 1938 represented nearly half of aggregate savings, it was offset by the fixed capital formation of the personal sector itself (i.e. by expenditure on new private houses and by unincorporated businesses). Admittedly the statistics for 1938 are subject to a large margin of error (as indeed are many of the later figures), but there is no evidence here that the personal sector was in 1938 financing on any substantial scale the capital formation of the rest of the economy. In the earlier post-war years, personal saving dropped to very small proportions of aggregate saving and the personal sector as a whole was borrowing heavily from the rest of the economy. The growth of personal savings from 1951 has not yet been sufficient to restore its proportion of the much greater total of national savings ; but in 1952 and 1953 the personal sector became on balance a substantial source of funds for the rest of the economy.

Personal Savings and Investment

The magnitude of these changes in personal saving underlines the importance of analysing the various forms which personal saving takes—the channels through which it passes into capital formation. For this inquiry, the statistics of aggregate saving provide only a starting point. Further progress requires an alternative approach, by measuring changes in the various forms of assets, physical and financial, held by persons. If such an analysis could be satisfactorily developed, it would be of interest not only as an alternative method of arriving at an estimate of personal savings, but for three more important reasons. Firstly, the form which saving takes, as distinct

from its aggregate level, may have a significant influence on the pattern of fixed capital formation and, therefore, on the pattern of industrial expansion. The familiar issue is the influence of the growth of savings through institutions on the supply of funds for industrial development. The second reason is that the channels of saving may well affect the aggregate of saving. One obvious issue here is the effect of the growth of " contractual " saving (for repayment of house mortgages, premiums on life insurance and pension schemes, repayment of consumer credit) on aggregate personal saving. Thirdly, the figure of saving, or change in assets, is, in fact, a net figure. It is the difference between the savings of those individuals who save and the dissavings of those who are running down their assets. It seems probable that the gross savings of the former group are several times as large as the net figure of saving, and the dissavings almost as large. Some indications about the characteristics of these two groups may be brought out by an examination of the rise or fall in various kinds of assets. But it seems likely that the most profitable method of research along these lines is the study of individual household budgets by sample inquiry ; I should draw your attention to the sample surveys of changes in personal assets and liabilities now being conducted by the Oxford Institute of Statistics. The first of these inquiries, on which a full report has been published,[1] related to the year ending April, 1952, but two further inquiries have since been conducted. Their results should shed much more light on some of the problems investigated here. These sample inquiries provide an analysis of saving and dissaving according to income and occupational groups, size of family, region and other categories. This sort of analysis is impracticable from the global approach at present used for national income statistics—an approach chiefly from tax data, accounts, and other sources yielding as a rule only general aggregates.

The data on which this discussion is based are set out in the table in the appendix. This table is divided into two parts : first, the figures from the Blue Book (and comparable figures, some very rough, for earlier years than those shown in the Blue Book) showing aggregate personal saving and the related change in total assets of the personal sector ; second, a number of series showing changes in those specific forms of capital assets (and liabilities) held by the personal sector for which, so far as I know, statistics exist. The difference between the change in aggregate assets and the sum of the changes in the specific assets measures (if the first two sets of figures be accepted) the area of our ignorance. I propose to discuss first the calculated changes in total assets, and then the changes in the identifiable specific assets. After that, I should like to offer some speculations and some highly tentative calculations about changes in those kinds of assets for which no direct statistics exist.

Some points of definition should be made first. In the first place, it should be observed that the table reflects only *actual transactions* in assets ; no allowance is made for changes in assets due to capital appreciation nor to depreciation of fixed assets (except for stocks). Hence the table may be very far from a complete account of changes in the *market value* of personal assets.

Secondly, the meaning of the term " personal sector " in the national accounts should be made clear. The savings of the personal sector include not only the savings of wage and salary earners and recipients of property income ; they include also the whole savings of unincorporated businesses (farmers, professional people working on their own account and other sole traders and partnerships). The savings earned by these businesses—although in part comparable with the undistributed income of companies rather than with personal saving in the ordinary sense—cannot be dis-

[1] See four articles in the *Bulletin of the Oxford Institute of Statistics* by H. F. Lydall : (1) November–December, 1952 ; (2) February–March, 1953 ; (3) June–July, 1953 ; (4) October–November, 1953. The last article includes a general summary.

tinguished from the more strictly personal savings of their proprietors.[1] Further, the transactions of the personal sector are consolidated with those of certain " collective persons." The most significant of these are the life funds of the assurance companies and private pension schemes of businesses (whether handled by assurance companies or not). The investment income on these accumulated funds is treated in the national accounts as part of the investment income of persons, and the increase in the funds (roughly, the excess of premium receipts and investment income over benefits paid and administrative expenditure) is treated as part of personal saving. The personal sector includes, too, charities and other " non-profit-making bodies " such as universities, which are also treated as " collective persons."

Thirdly, it should be pointed out that purchases of all durable consumer goods, except dwelling-houses and land, are treated as current expenditure by consumers. This may well appear to conflict with the behaviour of people in the real world, and any attempt to analyse the determinants of personal saving must take account of changes in the level of expenditure on durable consumer goods.

Net Change in Total Personal Assets

We begin with the Blue Book (and earlier) estimates of total personal saving, derived as a residue from the income and expenditure account of the personal sector. This figure does not, however, equal the change in personal assets. Adjustments must first be made for certain transfers regarded as capital transactions to which there is no counterpart in the form of an acquisition, or disposal, of assets. These transfers are : (*a*) Additions to tax reserves—the excess of tax accruing on the year's income over tax actually paid. The need for this adjustment arises because the Blue Book reckons saving after deducting the tax *accruing* on the year's income, the figure of tax accruing being regarded as more useful for most purposes than the figure of tax actually paid which, except for P.A.Y.E. incomes and dividends, largely relates to the income of a previous period. For reckoning the change in assets, however, it is the figure of tax actually paid that is relevant. This is important, especially for unincorporated businesses taxed under Schedule D. (*b*) Capital transfers received : these consist of war damage compensation payments and (in the early post-war years) war gratuities, which are best treated as receipts on capital account rather than as forms of personal income. The fact that the payments may be " blued " on immediate consumption does not invalidate the method of accounting. (*c*) Taxes on capital paid : the only taxes reckoned under this heading are death duties and the special contribution, which are—by the criterion of the " reasonable transactor "—treated as taxes on capital from the point of view of the taxpayer. Personal saving, adjusted for these transfers, should be equal to the net change in assets—physical or financial—of the personal sector as a whole. This is shown in item 5 of the Appendix table.

We might first examine these aggregates. Some comment is doubtless expected on the margin of error surrounding these estimates of personal saving and thus the estimates of changes in total personal assets. For the pre-war years, the war period, and the immediate post-war years, one is bound to attach a very wide margin of uncertainty to the figures of saving shown. Until 1948, no comprehensive data were available about fixed capital formation or about stock changes. Thus the figure of personal saving cannot be tested by comparison with aggregate capital formation less the saving by other sectors. From 1948 onwards, the figures of aggregate capital formation, at least, are much more firmly based, being founded on the post-war censuses

[1] Some of this saving is, of course, put back into the business in the form of increases in real assets, but it would be wrong to assume that all such capital expenditure is necessarily financed by the proprietor's own saving.

of production and distribution and similar direct data. Thus any large error in personal saving would require a compensating error in the savings of public authorities, companies, public corporations, or through the balance of payments.

There is one very rough check on the general trend of the figures of personal saving over the years 1938 to 1950. Some preliminary studies[1] have been made by Mrs. Langley, of the Oxford Institute of Statistics, of total personal wealth in these years. Her estimates are obtained by the well-known method of treating estates liable to estate duty in each year, of which particulars are published in the annual reports of the Inland Revenue, as samples of the total of personal wealth. The estates are analysed by sex and age-group of the owner, and the statistics recorded by the Inland Revenue are grossed up by using the general mortality rates for the appropriate sex and age-groups (and, when possible, social class). Allowance must also be made for estates of less than the minimum size (since 1946, £2,000) liable to duty. This method was used earlier by Sir Bernard Mallet, Professor Daniels and Mr. Campion in their analyses of the national capital. A number of difficulties in applying the technique are encountered and must necessarily cast some doubt on the precision of the results.

Mrs. Langley's statistics show a rise in total personal wealth (for Great Britain) from just under £20 billion in 1936–38 to about £33 billion[2] in 1950—a rise of £13 billion. This represents, broadly, the rise in the market value of assets. The figures from the Blue Book, in the appendix, show for this period a rise of about £3½ billion (excluding the rise in life and pension funds which would not be reflected in the estate duty statistics and allowing roughly for depreciation of fixed assets). The national income statistics, however, since they refer only to actual transactions, allow nothing for capital appreciation on existing assets (except stocks). Such capital appreciation must represent a very large proportion of the rise in personal wealth over the period. From a study of the composition of assets liable to estate duty (see also page 119 below), it can be estimated that of total personal wealth in 1936–38 rather over £10 billion represented securities, on which the capital appreciation by 1950 might be between £0.5 billion and £1 billion. About £4 to 4½ billion represented other assets, of which market values have appreciated very substantially (chiefly houses, but including also other buildings, land, trade assets and household goods) ; it is possible that the prices of these assets have tripled since pre-war. The balance of the estimated £20 billion of property consists of cash and other assets, most of which are not susceptible to capital appreciation.

It might be thought that the grossing up of estates liable to estate duty might afford an independent and comprehensive method of measuring changes in personal assets, and therefore in saving, from year to year, giving a guide not only to the aggregates, but also to the composition by types of assets. The method certainly has considerable value for measuring the order of magnitude of large changes over a period, but the instrument is probably not fine enough to measure the rather small changes that occur from year to year. Among the obvious difficulties, fully described by those who have used the method, are the possible unrepresentativeness of a "sample" consisting only of those who die in a particular year and the difficulty of identifying from the statistics the estates brought under review in a year with the actual deaths of that year. To these problems must be added, for the purpose we now have in mind, the very great difficulty, with present information, of dividing changes in wealth due to changes in capital appreciation from those due to actual transactions in assets. A

[1] "The Distribution of Private Capital, 1950–51," by Kathleen M. Langley, *Bulletin of the Oxford Institute of Statistics*, January, 1954.

[2] Mrs. Langley makes no estimate for 1950 of the value of estates of less than £100. I assume the figure for such estates is about £1 billion, as in 1936–38. The upper limit (in view of the number concerned) cannot much exceed £2 billion.

careful examination of the estate duty statistics might, however, yield some check on the general trend of personal assets during the post-war period as a whole. The estate duty statistics, as recorded, for the period 1946 to 1952 show signs of a rising trend in the total value of estates passing on death ; how much of this is due to appreciation of certain assets (offset by depreciation of other assets, especially securities), how much to a rise in the number of deaths in the relevant age-groups, and how much to the actual transactions in assets to which the savings estimates in the national income estimates should refer, requires further investigation.

Still another method of estimating changes in income-yielding assets might be imagined. This is to capitalise the actual income received. If this could be done accurately, taking each class of assets separately, it should be possible in principle to produce an accurate account of changes in assets resulting from actual transactions. There are, however, at least two difficulties. The first is that we do not, in fact, know the *composition* of personal income from property. The Blue Books quote only a single figure of personal income from rent, dividends and interest. A rough figure could be assigned to the rent component. But the distribution of income received by persons among the various classes of securities—Government, industrial debentures, preference and ordinary—is not obtainable.[1] The second difficulty may be even more serious. This is that the average yield on securities, especially on ordinary shares, needed to capitalise the income, is unknown. It is true that a number of indices of share prices and yields exist, but their coverage is restricted to the shares most prominent in the market. To be accurate enough to use for capitalising total personal income from ordinary shares, which approaches £500 million a year, a much more comprehensive index would be needed. May I suggest (not only for the reasons given here) that a really comprehensive index of share yields and prices is a major statistical need ? Again, so far as they go, calculations made on this basis are not inconsistent with the long-term changes in total personal assets shown in the appendix, nor with the changes in assets derived from grossing-up estates liable to estate duty. But the margins of error are too large to render this method useful for measuring year-to-year variations.

Changes in Identifiable Specific Assets

We may now turn to the alternative approach of measuring changes in the various specific kinds of assets of the personal sector. These are set out in items 6 to 14 of the appendix.

The first group (items 6 to 9) consist of *physical assets*. The estimates all come from the Blue Book ; they show the capital formation of unincorporated enterprises in fixed assets and in stocks, and the net acquisition of new houses by the personal sector. Attention might be directed to the rather volatile element of stock changes of unincorporated enterprises. In some years, 1948 and 1951, these stock changes were large enough to account for half or more of the total change in personal savings ; in these years, too, about half the change in the value of stocks was represented by stock appreciation. The last item (expenditure on new houses) is an estimate of the work done on new houses for private owners. (It is assumed that progress payments, in addition to final payments, are about equal to the value of work done, though there may, in fact, be a difference in timing.) In theory, of course, an item should also be added for net acquisition, or disposal, of existing houses by the personal sector from, or to, other sectors, about which there is no information. It can hardly be very large.

[1] Total payments of each category of interest, dividends, etc., by each sector can be estimated ; receipts of interest, dividends, etc., by each sector, other than persons, can be estimated in total, but not by category. Hence we are left with a single figure of total receipts by persons.

The item also includes any houses of which the erection is financed wholly by the builder and no attempt is made to exclude any house-building for companies.

The second group of assets consist of certain forms of *financial assets* (and liabilities). Information can be got about five categories of investment in financial assets—the channels, so far as they are identifiable, through which the personal sector lends to, or borrows from, the rest of the economy. The first category (item 10) shows changes in the net position of borrowers from *building societies*. It may usefully be compared with the series in item 8 showing estimated personal expenditure on new houses. The comparative stability, except during the war years, of both repayments and advances is significant. It is clear that the bulk of building society advances was in respect of old rather than new houses from 1940 to 1952 ; but the proportion of new houses in the total of advances must have been larger in 1953. It may also be noticed that in each year from 1946 to 1951 the personal sector as a whole was on balance borrowing from building societies more money than was going into new housing ; on " housing account," so to speak, the personal sector as a whole was adding more to its liabilities than to its assets.[1] In 1952 the two figures were about equal. In 1953, the balance shifted ; as in the pre-war years, personal expenditure on new house construction exceeded net borrowing from building societies ; some part of private house-building was financed out of savings—or, of course, from the disposal of other assets.

The second category of financial investment is that through *life assurance*, measured by the increase in funds of the companies. Some may prefer to see this form of saving measured by premiums, etc., paid ; if the personal sector is considered as a whole, saving through premiums must, of course, be regarded as offset by dissaving through pensions and benefits received, and by administrative costs.

These are the figures for certain years :

TABLE II.

Life Assurance Companies Established in the United Kingdom : Ordinary Business.

(£ million)

	1938	1946	1949	1952
Premiums and consideration for annuities ..	102	135	186	254
Claims paid and outstanding, annuities, surrenders and cash bonuses	84	103	117	138
Net receipts	18	32	69	116
Increase in funds (Appendix, item 11a) ..	38	69	95	127

SOURCE : Annual Abstract of Statistics No. 91, Table 311.

Thirdly, a very rough estimate is included (item 12) for the increase in funds of private *pension schemes* (other than those insured with the Life Offices and included in their accounts). Very little is known about the size of this important and growing channel of saving which now approaches that of the life assurance companies' ordinary business. The figures in the appendix are consistent with the estimates used in the

[1] As suggested below (page 125), there was probably a sizeable additional increase in liabilities on " housing account " in the form of mortgage loans from assurance companies.

last Blue Book, although later information, including a recent report,[1] shows that these estimates are probably an understatement. All the figures for earlier years in the table must be regarded as conjectural.

The fourth class of financial investment is a number of channels grouped as "*small savings*" (item 13). The series of major interest here is the familiar figures for National Savings (changes in amounts outstanding in Post Office and Trustee Savings Banks, National Savings Certificates, Defence Bonds, and other Government securities on the Post Office Register). This is the only channel of saving for which anything more frequent than annual returns are published. It is obvious from the appendix that savings through this channel cannot be regarded as representative of personal savings as a whole (although it was not, in fact, so bad a guide to the total during 1940–49). However, it is worth noting that the corresponding figures for the first half of 1954 show net saving of £46 million, compared with dissaving of £45 million in 1953 (of which £18 million was in the first half of 1953). Investment in building societies' shares and deposits is also included in the category of "small savings"; there is a certain amount of investment through this channel from sources other than persons, but the amounts are not published.

The fifth class of financial investment is the change in personal *net bank deposits* (i.e. deposits less outstanding advances). In this case, "persons" is more rigidly interpreted than elsewhere in the statistics, and excludes all accounts known to be used for business purposes.

This completes the series of specific assets for which direct information relating fairly closely to the holdings of the personal sector appears at present to be available. It will be seen from the appendix that in 1952 and 1953 the changes in these identifiable assets are, very broadly, reconcilable with the estimates of aggregate personal saving.

The Channels of Personal Saving in 1952 and 1953

Before discussing the possibilities of reconciliation for earlier years, it may, therefore, be useful to call attention to one or two features of the pattern of personal saving in the immediate past, for which the complicating unknowns may effectively be ignored. There is a variety of ways in which the different forms of assets might be summarised into groups significant for economic analysis. One possible arrangement is shown in Table III, the emphasis—as regards financial assets—being on the distinction between increases in assets resulting from "contractual" saving on the one hand and, on the other, assets acquired through the channels of spasmodic or "once for all" acts of saving. The distinction is not an easy one to make. Thus, a certain amount of National Saving through savings groups might qualify as "contractual." On the other hand, a large proportion of the repayments to building societies must represent premature repayments (e.g. when an existing house changes hands). This proportion is put as high as one-half of the total repayments by the Oxford Savings Survey.[2]

Unidentified Channels of Saving

It is clear, however, that no adequate analysis of the channels of saving is possible while we remain ignorant of the composition and significance of the unidentified assets and liabilities. Perhaps the most striking feature of the appendix table is that the changes in identified forms of saving (except stocks and private housing) are remarkably constant from year to year. In particular, they contribute very little towards explain-

[1] "The Growth of Pension Rights." A study prepared for the Institute of Actuaries and the Faculty of Actuaries, 1954.

[2] *Bulletin of the Oxford Institute of Statistics*, October–November, 1953, p. 356.

ing the great increase in apparent total personal saving in 1952 and 1953 compared with earlier post-war years. It appears that most of the volatile elements in personal saving and dissaving are concealed within this statistical residue.

What classes of assets and liabilities can the unexplained residue contain, and what evidence is there about them ?

TABLE III.

Changes in Assets of the Personal Sector, 1952 and 1953.

(£ million)

	1952	1953
Net change in personal assets through :		
Capital formation by unincorporated enterprises :		
in fixed assets (gross)	190	184
in stocks (value)	3	60
Capital formation in new private houses (gross)	101	172
Less advances from Building Societies	— 266	— 298
Contractual investment :		
Repayments to Building Societies	160	166
Life assurance, pension funds, and friendly and collecting societies	260	308
Other investment (National Savings, Building Societies, net bank deposits and unidentifiable assets)	70	130
Total increase in assets	518	722

SECURITIES

The most obvious omission from the list of identified assets is securities of all kinds, other than those included in National Savings and in life assurance and pension funds. Unfortunately, no data exist from which any kind of direct estimate can be made of changes in personal holdings of securities. I might point out in passing that such data are collected in the United States by the Securities and Exchange Commission and make an important contribution to the reconciliation (not yet wholly successful) between personal savings as estimated by residue from the U.S. national accounts, and personal savings as estimated from recorded changes in personal assets and liabilities. Thus it is interesting to see that an increase in holdings of industrial securities accounted for one-quarter of the net rise in personal assets in the U.S. in 1951—when a rise in total assets and saving occurred comparable with that in the United Kingdom one year later.

In default of direct information, appeal may be made once more to estimates derived from the grossing up of estates liable to estate duty. Once again, these may give some guide to long-term trends but little to year-to-year movements. The implicit assumption that the dying are a fair sample of the living must be remembered.[1]

If the proportionate composition of estates liable to estate duties (as shown in the Inland Revenue reports but adjusted for estates below estate duty limits) be applied to

[1] This may introduce more serious errors into an analysis of the *composition* of assets than into an analysis of total assets, since no correction can be made to the distribution by type of asset for the differing mortality rates in the different sex and age groups.

Mrs. Langley's estimates of total personal wealth, it can be estimated that the market value of securities held by persons (excluding the life and pension funds) was approximately as follows :

TABLE IV.

Securities Held by Individuals.

(£ billion)

	1936–38	1950
Government and municipal securities*	4.0	6.2
Less " National Savings "†	— 0.7	— 3.3
Other Government and municipal securities	3.3	2.9
Companies‡	6.3	8.2

* Including Commonwealth and foreign.
† National Savings certificates (including accrued interest) and securities on Post Office registers.
‡ Including Commonwealth and foreign ; excluding shares and deposits in building societies.

The figures for total Government and municipal securities (on the first line of figures above) include National Savings certificates and securities on the Post Office register (mainly Defence Bonds) which have already been included as " National Savings " among " identified " assets. Hence the apparent amounts of Government and municipal securities in the " unidentified " assets, as shown on the third line of figures above, are £3.3 billion in 1936–38 and £2.9 billion in 1950. The fall in prices of Government securities during this period was probably, however, about enough to account for most of this estimated fall in the value of securities held by persons. Thus there is no evidence here of any significant net change in aggregate personal holdings of Government and municipal securities (other than the securities covered by " National Savings ") between 1936–38 and 1950.

During this period, however, some £2 billion (nominal value) of industrial securities were in effect converted into Government securities by the various acts of nationalisation. Most of these industrial securities must have been held by persons. The suggestion is, therefore, that persons were, in fact, on balance disposing of some classes of Government securities (including overseas securities, of which the estate duty statistics suggest some fall in personal holdings), but that this loss was about offset by the acquisition of compensation stocks.

Of the rise in apparent holdings of company or industrial securities, from £6.3 billion in 1936–38 to £8.2 billion in 1950,[1] perhaps £1 billion or more can be explained by the appreciation of market values. Taking into account the loss of securities in companies which were nationalised, this suggests a very substantial net purchase by persons of industrial securities, on a scale at least equal, for example, to the total new issues during the period.[2]

In total, therefore, it appears that persons (excluding the life and pension funds) held in 1950 about the same volume of Government securities other than in " National Savings " as they did before the war and perhaps a larger volume of industrial securities (ignoring changes in capital values). I should remind you that all the figures which

[1] Among the negative items included in this net increase is the loss of overseas share capital, including £150 million of Argentine rail shares in 1948.

[2] Total new industrial issues (excluding the public corporations issues) were £1.0 billion in 1946–53.

contribute to this conclusion have extraordinarily large margins of error, and no weight can be attached to the relatively precise statistics quoted. Nevertheless, one would expect that any really substantial net change in securities held would be brought to light even by the blunt instruments we are obliged to use.

Can any light be thrown on the probable trend of personal holdings of securities during the post-war period ? The statistics of estates liable to duty show the following trend of Government and municipal securities (including overseas securities) :

	£ million
1947–48*	162
1948–49	170
1949–50	180
1950–51	173
1951–52	175
1952–53	150

* The estates shown as liable to duty in each financial year relate roughly to deaths in the preceding calendar year (1947–48 estates to deaths in 1947).

SOURCE : Annual Reports of the Commissioners of Inland Revenue.

These statistics include National Savings certificates and securities on the Post Office register, of which the total amount outstanding was roughly constant during the period. Prices of other securities were falling over the period. It is impossible to produce a price index which applies strictly to Government securities held by persons, but it seems probable that the bulk of the variation over the period as a whole could be accounted for by price changes. There is no evidence of any great change in the volume of securities held by persons.

The corresponding figures for company securities in estates liable to duty are :

	£ million	Price index (1947 = 100)*	£ million at 1947 prices
1947–48	298	100	298
1948–49	277	97	285
1949–50	264	88	300
1950–51	250	86	290
1951–52	255	90	283
1952–53	221	79	280

* Actuaries Investment indices weighted : Debentures 1 : Preference 1 : Ordinary 2.

SOURCE : For first column : Annual Reports of the Commissioners of Inland Revenue.

Indices of security prices have been applied to remove the effects of capital appreciation. (I should warn you that the use of alternative share price indices would give somewhat different results.) So far as this goes, it suggests at first sight no significant change in the volume of securities (ignoring price changes) held by persons.

The very tentative conclusion is, therefore, that holdings of Government securities changed little in volume either between pre-war and 1950 or during the post-war years ; but that holdings of company securities may have risen in volume during the war and changed little thereafter.

The extent to which the volume of personal holdings of company securities

(especially ordinary shares) can vary is, however, limited (granted a fairly stable total of shares in existence) by the extent to which companies and foreigners—effectively the only alternative holders—are buying or selling. The great bulk of transactions in company securities must in fact take place between buyers and sellers in the personal sector, who must hold the great bulk of the securities concerned. The main effect of an attempt to dissave through selling industrial securities would thus be reflected in prices without changing much the *volume* of securities held by the personal sector as a whole.

A part of any fall in securities held by individuals has, of course, been offset by the growth of institutional saving through life assurance and pension funds. Between 1937 and 1946, the value of government and municipal (including overseas) securities held by the assurance companies (the bulk representing the life funds) rose from £581 million to £1,221 million (as valued in their balance sheets) ; the rise in industrial securities was from £596 million to £761 million. Between 1946 and 1952 the increases were : for Government, etc., securities from £1,221 million to £1,514 million, and for industrial securities from £701 million to £1,131 million.

Consumer Credit

The statistics of consumers' expenditure relate (like the published statistics of retail sales on which they are largely based) to *acquisitions* of goods and not to cash payments. If credit trading expands, then the excess of goods acquired over goods paid for will increase, and saving as defined—other things being equal—will diminish. This reduction represents an increase in the financial liability of consumers to credit traders. An increase in credit trading will thus be reflected as a fall in the net financial assets of the personal sector.

The available information about credit trading is extremely incomplete. Regular statistics are published of sales (by number) on hire purchase of radio and television[1] and vehicles,[2] but no statistics are published about the very large amount of credit trading of various kinds in furniture and in clothing ; nor is there any indication of the amount of the trading on ordinary weekly, monthly or quarterly accounts, although in a time of changing prices or turnover the amounts outstanding might vary quite appreciably.

An accurate estimate of changes in the total amount of consumers' credit outstanding would require knowledge, both of the total value of credit sales and of repayment terms. On the credit terms laid down in 1952 by the Board of Trade (one-third minimum down-payment and maximum of eighteen months for full payment), the debt outstanding (assuming constant sales) at any time should be somewhat over half the annual value of credit sales. The *average* debt outstanding should be a good deal less than this proportion of sales, since for many hire purchase contracts, and, probably, for most of the check trading in clothing, the credit terms would be much shorter. For national accounting purposes, it would also be necessary, strictly, to make a deduction for that part of the change in consumer credit which is carried by the unincorporated retailers within the personal sector.

The roughest possible guess at the order of magnitude of changes in total consumers' credit suggests that the liabilities of the personal sector might have increased during most of the post-war years by between £20 and £40 million a year. This is not intended as a serious estimate. It serves only to show that this factor makes some contribution towards the row of unidentifiable minus quantities in item 16 of the appendix. It cannot explain much of the very large unidentifiables in 1946–51 ; but it might go some way to explain the smaller quantities shown for 1952 and 1953.

[1] By Radio and Television Traders Association.
[2] By H.P. Information.

TRANSACTIONS IN FIXED ASSETS WITH OTHER SECTORS

In principle, the statistics of fixed capital formation by each sector should include purchases of existing fixed assets from, less sales of assets to, other sectors, e.g. the sale of private land to companies for building new factories, or to the Government. (A purchase by one sector is offset by a sale from another sector, so that the total of fixed capital formation by the nation is not affected.) In practice, very incomplete information is available about such transactions, and a rough estimate is made in the Blue Book figures which is more likely to understate than to overstate their amount. If, as seems probable, the flow is from the personal sector to other sectors, then there may well be, within the unidentified assets, a regular loss due to such net sales of existing fixed assets. There is no possibility of putting even an order of magnitude on the amount.

When an unincorporated business (for instance, a shop) is converted into a company (public or private), there is, again, a loss of physical assets to the personal sector, offset, presumably, by a gain in financial assets : John Jones, the proprietor, loses his shop but receives shares in John Jones, Ltd. A physical asset (John Jones' shop) is added to the assets of the Company sector, together with a liability in the form of shares in John Jones, Ltd. Since no attempt is made—because of lack of information—to record such transactions in the figures of fixed capital formation by each sector, all the transactions are by implication included in the balance of transactions in financial assets (the title to the shop), and in the unidentified transactions. The gain in financial assets to the personal sector would be included in the figures given above (such as they are) of changes in securities held. If such conversions are, in fact, on a large scale, they may help to explain the apparent stability of personal holdings of securities. The loss of the physical assets to the personal sector would appear as a negative item among the changes in unidentified assets.

The only guide to the possible size of this element is the statistics of private companies registered which show a fairly steady net growth in nominal paid-up capital of some £50 million a year from 1946 to 1953. It is reasonable to suppose that unincorporated businesses are generally converted, in the first place, into private rather than public companies. But there is no basis for guessing what proportion of the increase in private companies' capital represents conversions of existing unincorporated businesses.

The sale of unincorporated businesses to existing companies would have much the same statistical consequences as a conversion (although in this case the personal sector might gain cash as well as securities).

A special case of these inter-sector capital transactions is the sale of " going concerns " from a private to a public sector on nationalisation. To avoid large variations in the figures of fixed capital formation of the separate sectors, these transactions are, again, treated as transactions in financial assets (i.e. titles to fixed assets), not as transactions in fixed assets. However, the only case which could substantially affect the capital accounts of the personal sector is the nationalisation of unincorporated road haulage concerns.

FINANCIAL LIABILITIES OF UNINCORPORATED BUSINESSES

Unincorporated business may have outstanding financial liabilities to other sectors in several forms (other than those identified in the appendix). Some of these liabilities may vary in amount very substantially from year to year. The income of such businesses (" income from self-employment " in the Blue Book) has grown from £1,145 million in 1946 to £1,800 million in 1953. It is not unreasonable to expect that their net financial liabilities have also grown considerably, although not necessarily so continuously.

The bank position of unincorporated business might be examined first. The statistics of " personal " net bank deposits, referred to above, exclude net deposits (deposits less advances) known to be on business account. The quarterly analyses made by the British Bankers' Association of bank advances by industry offer some guidance to the trend of gross liabilities to the banks. If it be assumed that, within each industry group shown in these statistics, unincorporated businesses have advances outstanding in proportion to their share of the profits of that industry group, it may be estimated that the total of advances to unincorporated businesses has changed as follows :

TABLE V.

*Estimated Change in Bank Advances Outstanding to Unincorporated Businesses.**

	£ million
1947	+ 69
1948	+ 59
1949	+ 50
1950	+ 43
1951	+ 86
1952	— 55
1953	— 3

* The figures refer to changes between November in each year.

SOURCE : Derived from *Monthly Digest of Statistics* (e.g. September, 1954, Table 141).

The increase in advances is a negative item in the change in unidentified assets. But how far it has been offset by changes in bank deposits is not known.

Another element that may be of substantial size is changes in the outstanding credit position of unincorporated businesses towards their suppliers (in so far as the latter are companies) or towards their customers (the bulk of whom, however, are within the personal sector, since retail trade constitutes so large a proportion of unincorporated businesses). No way has been found of estimating what this might be. Published figures of commercial vehicles, tractors and industrial machinery[1] sold on credit terms suggest increases in debt outstanding which are of some significance (although substantially smaller than the increases in consumer credit referred to above). But apart from these capital goods, the weight of debt outstanding on current supplies may be very large. For example, the total purchases of unincorporated businesses in retail trade (which contains the bulk of unincorporated business) must amount roughly to about £1,700 million a year. This leaves room for a sizeable increase in outstanding debt in periods when turnover is rising.

Moreover, there is evidence in the Board of Trade statistics of retail sales of " independent " retailers (as distinct from department stores, multiples and co-operatives) that their turnover, although increasing fast up to 1951, has been stable or even falling since. This trend, together with the effects of changes in monetary policy, might conceivably account for mounting liabilities until 1951 or 1952 and comparative stability thereafter.[2]

CURRENCY

Holdings of currency by the personal sector will be included among the unidentified assets. The statistics of " average estimated circulation with the public " (of which

[1] Figures published by Hire Purchase Information.

[2] The " Economist " analysis of company balance sheets also shows a very substantial reduction after 1951 in the rate of increase of short-term trade credit (i.e. under the categories " creditors " and " debtors ").

only an uncertain proportion is held by the personal sector) show a slight decline in 1947 and 1948, fairly stable figures in 1949 and 1950, followed by a rise in 1951 which has continued.

TABLE VI.

Notes and Coin : Change in Average Estimated Circulation with the Public.

	£ million
1946	+ 37
1947	− 55
1948	− 71
1949	+ 14
1950	+ 21
1951	+ 73
1952	+ 92
1953	+ 78

SOURCE : *Monthly Digest of Statistics* (e.g. September, 1954, Table 138).

This, again, makes some contribution towards explaining the trend of unidentified assets.

OTHER DEBTS

One other item that deserves mention is borrowing from assurance companies, either by house mortgages or by other loans. Total mortgages in the balance sheets of assurance companies[1] rose fairly steadily from £150 million at the end of 1945 to £362 million at the end of 1952—one-third as large an increase as that in outstanding mortgage debt due to building societies. Loans on policies and personal security rose from £27 million to £41 million. How much of this increase of over £200 million represented an increase in the liabilities of the personal sector cannot be estimated.

* * *

From this discussion I think two conclusions stand out. Firstly, the discussion of possible changes in assets of the business part of the personal sector—through sales of going concerns, conversions into companies, or variations in debt outstanding—show the importance of further study in this part of the field. Secondly, I hardly expect that you will be satisfied with the very inadequate evidence about changes in personal holdings of securities. The margin of error in the calculations offered, and the magnitudes dealt in, are so large that no statistical conclusions can be drawn with certainty from existing information.

Thus this attempt to build up a complete estimate of changes in personal assets from direct evidence—some of it highly dubious—of changes in specific personal assets and liabilities cannot yet be regarded as successful. It may strike you as a most unsatisfactory detective story, ending with none of the suspects convicted and yet few completely cleared of suspicion. One can emerge at this stage with only one firm conclusion, and that a conditional one : if there is any value in knowing with any certainty the sources, level and channels of personal saving, its determinants and its effects, then much more study of existing data, as well as certain additional data, are urgently needed. There are opportunities here for economists and statisticians in the universities, in business and in Government offices.

London. C. T. SAUNDERS.

[1] *Annual Abstract of Statistics*, No. 91, Table 315.

APPENDIX

The Capital Account of

	1936	1937	1938	1939
RECEIPTS				
1. Personal saving after provision for tax on income ..	..	..	241	325
2. *Plus* additions to tax reserves	..	..	5	30
3. *Plus* capital transfers received	—	—	—	—
4. *Less* taxes on capital paid	(−88)	(−89)	−78	− 77
5. *Funds available = net change in assets*	—	—	168	278
PAYMENTS				
Acquisition of physical assets.				
6. Farms :				
(*a*) Fixed capital formation (gross)	(6)	(10)	(7)	(12)
(*b*) Increase in value of stocks	—	—	—	(15)
7. Other unincorporated enterprises :				
(*a*) Fixed capital formation (gross)	(60)	(66)	(64)	(54)
(*b*) Increase in value of stocks	—	—	—	(20)
8. Personal expenditure on new housing (gross)	145	132	125	84
9. *Total acquisition of physical assets*	211	208	196	185
Acquisition of financial assets				
10. House mortgages with Building Societies :				
(*a*) Repayments	83	87	87	75
(*b*) *Less* Advances	−140	−137	−137	− 94
Net liquidation of debt	− 57	− 50	− 50	− 19
11. Life assurance : increase in funds :				
(*a*) Ordinary business	40	42	38	19
(*b*) Industrial business	20	20	22	15
Total	60	62	60	34
12. Private pension schemes : increase in funds	(20)	(20)	(20)	(20)
13. " Small savings " : increase in funds :				
(*a*) National Savings	58	56	57	166
(*b*) Friendly societies	6	5	5	4
(*c*) Collecting societies	5	6	5	6
(*d*) Building Societies—shares and deposits ..	47	52	43	7
Total	116	119	110	183
14. Increase in net personal bank deposits	—	—	—	—
15. *Total of identified payments above* (9 *to* 14)	350	359	336	403
16. *Unidentified payments* (5 *less* 15)	—	—	−168	−125
17. *Net change in assets*	—	—	168	278

For notes see next page.

the Personal Sector (£ million)

1940–4		1945	1946	1947	1948	1949	1950	1951	1952	1953
Total	Per annum									
(4,200)	(840)	(700)	245	103	59	95	102	237	706	870
493	99	34	60	81	1	44	66	62	— 84	— 31
—	—	80	330	260	116	105	97	68	55	49
−709	−142	−158	−144	−164	−215	−254	−190	−194	−159	−166
3,984	797	656	491	280	— 39	— 10	75	173	518	722
(130)	(26)	(26)	(34)	(63)	84	81	79	86	80	79
(150)	(30)	(30)	(30)	(30)	38	41	42	49	46	40
(92)	(18)	(19)	(46)	(73)	87	101	111	123	110	105
(225)	(45)	(45)	(−20)	(80)	56	28	62	146	— 43	20
29	6	12	49	64	45	54	51	59	101	172
626	125	132	139	310	310	305	345	463	294	416
273	55	86	121	150	161	164	161	169	160	166
−128	— 26	— 98	−188	−243	−264	−276	−270	−268	−266	−298
145	29	— 12	— 67	— 93	−103	−115	−106	— 99	−106	−132
151	30	51	69	78	87	95	101	112	127	165
111	22	42	42	35	36	31	32	22	22	(22)
262	52	93	111	113	123	126	133	134	149	187
(100)	(20)	(30)	(30)	(40)	(50)	(60)	(75)	90	(100)	(110)
3,233	647	695	518	113	25	61	— 7	1	— 80	— 45
31	6	6	5	6	3	2	2	3	4	4
35	7	9	9	11	9	11	11	11	7	(7)
23	5	26	49	72	78	98	110	97	118	157
3,322	665	736	581	202	115	172	116	112	49	123
500 (+)	125	181	201	152	62	— 26	— 14	— 26	60	82
4,955	1,016	1,160	995	724	557	522	549	674	546	786
−971	−219	−504	−504	−444	−596	−532	−474	−501	— 28	— 64
3,984	797	656	491	280	— 39	— 10	75	173	518	722

(+) From end—1940 only.

SOURCES FOR APPENDIX

All figures in brackets are especially dubious and have little validity in themselves.

Items 1–4 : 1948–53 from *Blue Book*, 1954, Table 42. 1946–47 mainly from *Blue Book*, 1954, Tables 2 and 4. 1938 from *Annual Abstract of Statistics*, No. 91, Tables 283 and 289. 1939–45 chiefly from *Statistical Digest of the War*, Tables 181 and 183, and Cmd. 7933, item 1, being roughly adjusted for comparability with current estimates. The main adjustment is due to the fact that when the *Statistical Digest of the War* and Cmd. 7933 were compiled, repair and maintenance expenditure on buildings and other fixed assets were treated as expenditure on capital account and as part of gross capital formation. They have since been transferred to expenditure on current account. In addition, recent revisions to estimates of personal income from property, and of consumers' expenditure, probably entail some adjustment to the earlier estimates for 1939–45.

Items 6–8 : 1948–53 from *Blue Book*, 1914, Tables 42, 43, 46 and 49. Figures for earlier years are mostly very rough ; for the more respectable estimates, the writer is indebted to Mr. Philip Redfern of the Central Statistical Office.

Item 10 : *Annual Abstract of Statistics*, No. 91, Table 309, and earlier *Abstracts*.

Item 11 : *Annual Abstract of Statistics*, No. 91, Table 311, and earlier *Abstracts*. The figures for ordinary business refer to the increase in funds of companies established in the United Kingdom. The change in 1953 is derived from the slightly less comprehensive " British Life Assurance Statistics " published by the Life Offices' Association.

Item 12 : See text, page 117.

Item 13a : *Monthly Digest of Statistics*, September, 1954, Table 142, and earlier *Digests*.

Item 13b, c and d : *Annual Abstract of Statistics*, No. 91, Tables 317, 318 and 309 respectively, and earlier *Abstracts*.

Item 14 : Figures for 1940 to 1947 from *Statistical Abstracts*, Nos. 84 and 85. Figures for 1948 to 1953 published by kind permission of the Committee of London Clearing Banks. The statistics refer to the net deposits (deposits less outstanding advances) of persons, as distinct from businesses, financial institutions and public authorities ; they exclude, however, the net deposits of individual traders, shopkeepers, farmers and professional men when their accounts are known to be used for the purpose of business. Non-resident deposits are excluded.