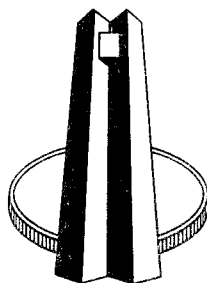


The compilation and importance of household debt in South Africa

By B.E. van der Walt and J.W. Prinsloo

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The views expressed in this paper are those of the author
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The compilation and importance of household debt in South Africa¹

1. Introduction

The spending and savings behaviour of a community is determined by various factors such as the material and social needs of people, tradition, the standard of living and the age distribution of the population. In addition, private consumption spending is determined to an important degree by the extent of and the actual and anticipated changes in the income of consumers, as well as their ability to spend future income now by making use of credit.

Credit extension is an important link in the transmission mechanism that relays changes in monetary policy to changes in the total demand for goods and services and the general level of economic activity. Greater access to credit makes it easier for business enterprises to start capital projects, augment stock levels, increase personnel and to take other steps to increase the extent of their activities. The availability of credit also makes it easier for households to spend. An increase in credit could entice consumers to make purchases now instead of in the future.

Little information is available in South Africa on trends in the debt of private households and the extent to which credit is used to finance current spending. The first objective of this study is to provide a brief review of the compilation of aggregate household debt. Secondly, the relative importance of household debt, its longer-term developments and relationship with personal disposable income and saving are reviewed. The next section particularly addresses the relations between consumer credit and various important economic variables, such as expenditure, consumer prices and the business cycle. The following section identifies and describes some of the more important factors that determine the extent and composition of consumer credit, whilst the last section encompasses the concluding remarks.

2. Definition of household debt

As discussed later at greater length, there are various reasons why private households are prepared to enter into credit transactions. In essence, the use of consumer debt is related to the eagerness of consumers to sacrifice

future consumption in order to obtain greater satisfaction from current consumption. Future consumption is surrendered because consumers will use income earned at a later stage to settle debts and meet interest commitments, and will therefore have less spendable funds at their disposal at that stage if they do not increase their credit commitments further.

The two major components of household debt are customarily classified into mortgage advances and consumer credit. Consumer credit is, in turn, subdivided into open accounts, personal loans at banks, other personal loans, credit card facilities, and instalment sale transactions and lease transactions.

2.1 Mortgage advances

Mortgage advances come into existence when households enter into loans (home mortgages) to buy homes and other fixed property and then offer the property concerned as security for the loan. One feature of such loans is that the borrower (mortgagee) will, under normal circumstances, have to pay off a certain portion of the price of the property himself before the lender (mortgagor) makes the remaining portion of the purchase amount available. The size of the loan is usually determined according to the annual income of the borrower and the value of the pledged property. The loan is repaid over a long period that ranges between 20 and 30 years, although shorter periods can also be arranged.

In South Africa the interest on mortgage loans is determined at a variable rate and the lender may adjust the interest rate after giving one month's notice. The mortgagee may redeem the mortgage debt at any stage without being penalised. Repayment, however, usually takes place in monthly instalments. The amount repaid each month may vary in accordance with interest rate movements.

Mortgage loans are also entered into to acquire funds for purposes other than the purchase of fixed property. In such a case fixed property owned by households is pledged as security for the loan. The keen competition between the various financial institutions in South Africa since the first half of the 1980s has caused mortgage advances to be promoted increasingly for purposes other than the financing of transactions in fixed property.

2.2 Credit facilities for current consumption expenditure

2.2.1 Open accounts

Open accounts of households include all outstanding debits to dealers, and also those amounts payable to buy-aid associations for the purchase of goods and services from dealers.

¹ Valuable assistance in the preparation of this research paper was provided by Mr B.L. de Jager, Dr E.J. van der Merwe, Mr H. Smith and Miss M. van Zyl of the Reserve Bank's Economics Department. However, the opinions expressed in this research paper are those of the authors and do not necessarily reflect those of anybody else or of the South African Reserve Bank.

Purchases on open accounts enable consumers to separate the payment for goods and services from the time of actually receiving the goods or services. The purchase price must be paid in full on a predetermined future date or in instalments over a period of time.

Financing by way of open accounts is usually used for the purchase of durable and semi-durable goods and the rendering of consumer services. The period of credit extension is short and outstanding balances are normally payable within one calendar month of the date of the transaction. Instalments over periods of up to six months, however, are common, especially where semi-durable goods are involved.

2.2.2 *Personal loans at banks*

Personal loans granted by banks consist of overdraft facilities made available by banks to their clients and other advances granted to individuals. Overdraft facilities are available to the holders of current accounts at banks which enable clients to withdraw funds from such accounts over and above the amounts deposited into the accounts. Only that part of the overdraft facility that is actually drawn by the consumer is included in consumer credit. The conditions for the repayment of overdrawn accounts at banks are particularly flexible and are arranged at the discretion of the banks and with the client's needs and financial capabilities in mind. "Other bank advances" to individuals are made without these persons necessarily being holders of current or deposit accounts at that particular bank. The repayment of such debt is usually more precisely scheduled than the repayment of overdrawn accounts and repayment is normally required within a fixed period.

2.2.3 *Other personal loans*

Other personal loans consist of loans granted to persons by long-term insurers where the surrender value of a policy serves as security for the loan (so-called loans against policies). Loans made to farmers to finance consumption expenditure are, irrespective of the institution granting the credit, also classified as personal loans. However, loans entered into by farmers for the sole purpose of financing farming activities, are not regarded as part of outstanding consumer credit.

2.2.4 *Credit cards*

Credit card facilities are made available by banks and offer consumers a very convenient method of making purchases and deferring the payment of the purchase price. Debit balances on credit card accounts are usually payable within one calendar month after the cardholder's receipt of his account, but so-called budget facilities are also provided to postpone the payment over longer periods. The outstanding debit balances at the end of each calendar month, and not the total credit available, are taken into account in calculating total consumer credit.

2.2.5 *Instalment sale and lease agreements*

An instalment sale agreement (hire-purchase agreement), is a transaction in terms of which goods or services are provided to the buyer, but where the purchase price is paid in instalments over a period in the future. Although the purchaser takes possession of the goods, he does not become the owner and the seller is entitled to repossess the goods if the buyer does not comply with the provisions of the agreement. Instalment sale transactions are used almost exclusively to finance the purchase of durable consumer goods of which the prices are high relative to the income of the credit-taker, and the expected economic lifetime of the goods is long, for instance three to five years. The conditions of such credit agreements are regulated by the Credit Agreements Act (Act No. 75 of 1980) and the Minister of Trade and Industry is authorised to lay down regulations, for instance to determine the maximum period within which the full price is payable, and to fix that portion of the cash price that is required as initial deposit.

Lease agreements are transactions in terms of which goods are leased but where there is no arrangement that the debtor becomes the owner of the goods at any time during or after the expiry of the lease period. As the credit-taker or debtor does not acquire ownership in terms of the agreement, the outstanding commitments can perhaps strictly speaking not be regarded as consumer debt. The Statement of Generally Accepted Accounting Practices², however, lays down guidelines according to which the commitments of persons in terms of *finance lease transactions* are included in consumer debt. The finance lease agreement is regarded as an alternative for a credit sale transaction and all the risks and remuneration involved in the right of ownership of the asset concerned are transferred from the lessor to the lessee. However, the same considerations do not apply in the case of *operating lease transactions*, and the commitments in terms of these agreements should accordingly not be included in the estimates of the total consumer credit.

3. The calculation of household debt

The most important source of information used in compiling statistical time series of outstanding household debt is the data furnished by banks to the Office of the Registrar of Banks. Data on the outstanding balances of mortgage advances, personal loans, credit cards, instalment sale agreements and lease agreements of persons and private non-profit-seeking institutions are submitted monthly to the Registrar. Private non-profit-seeking institutions such as clubs, churches and welfare

² Statement RE105, *Accounting for Lease in the Financial Statements of Lessees*, as published by the South African Institute of Chartered Accountants and approved by the Accounting Practices Board, revised in January 1989.

organisations, are incorporated in accordance with accepted international principles as part of the household sector. The credit extended to such organisations is therefore part of consumer credit and of the total debt of households.

As indicated earlier, the outstanding commitments of persons in terms of operating lease transactions should not be regarded as part of consumer credit. Unfortunately the statements submitted by the banks do not distinguish between finance lease agreements and operating lease agreements of persons. As a result, the commitments of persons in terms of operating lease contracts had to be included in the calculated aggregate of consumer credit, and this led to a slight overestimation of total consumer credit. However, total outstanding commitments in terms of operating lease agreements, or contracts of incorporated businesses and of households, amounted to less than 3½ per cent of the total of consumer credit as calculated at the end of 1994.

From February 1991 the data furnished by the banks were used, without further adjustments, to determine the extent of outstanding consumer credit extended to households by monetary institutions. For the period before February 1991 data that were reported to the then Registrar of Deposit-taking Institutions and his predecessors were used to obtain "best" estimates of these outstanding consumer credit aggregates.

Data of the outstanding balances on the open accounts of households were obtained from census reports of the Central Statistical Service on retail trade, the motor trade and repair services. This information is, however, not available on a quarterly basis. Various indicators of lending activities had to be used in order to estimate quarterly data. These indicators were also used to obtain estimates of these credit aggregates for the periods between censuses. Estimates of the balances on open accounts and instalment sale agreements of households with the trade sector were based on surveys of instalment sale transactions and other credit transactions according to the financial statistics of the retail and motor trade, which are collected quarterly by the Central Statistical Service.

The quarterly data on credit financing of consumption expenditure by households on farms were obtained from the Department of Agriculture. Data of the personal loans granted to households by insurers where existing insurance agreements serve as security, are collected by the Reserve Bank on a quarterly basis from the relevant insurers.

As in various other countries, advances on mortgage loans are used increasingly by South African households for the purchase of durable consumer goods and other purposes³. Unfortunately, information on this kind of

utilisation of mortgage advances is not available separately. However, to provide a better indication of the outstanding debt levels of households in the economy, estimates and data available on housing loans were included in the estimates of aggregate outstanding household debt.

Deficiencies in the system of statistical reporting by financial institutions have, until relatively recently, prevented the estimation of a reliable time series of aggregate mortgage debt of households. Recent adjustments to the reporting system of the Registrar of Banks have, however, made it possible to draw a clear distinction between the mortgage debt of households and the mortgage debt of incorporated business undertakings. Data of the total outstanding debt commitments of households, which were used for the compilation of total household debt outstanding, are therefore available only since 1991. As home mortgage debt amounted to approximately 93 per cent of total mortgage debt outstanding for the period 1991 to 1993, this ratio was used as a proxy of total mortgage advances to estimate outstanding home mortgage debt for the period prior to 1991.

4. Developments in household debt

4.1 Relative importance of household debt

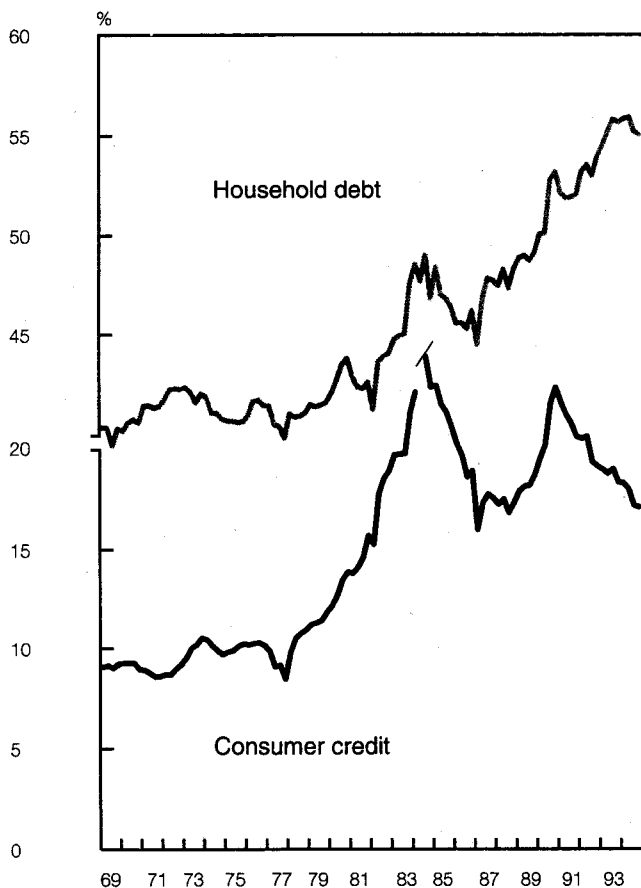
The growing importance of household debt in the South African economy is reflected mainly in the rise of total outstanding consumer credit (i.e. credit extended by banks, insurers and open accounts) relative to total credit extended to the domestic private sector by banks and other monetary institutions. The broadening of banks' lending activities to households, particularly during the 1980s, caused consumer credit to expand at a much faster pace than total bank lending to the private sector during this period (see Graph 1). During the 1970s consumer credit extension by banks and other monetary institutions, as a percentage of total credit extension by these institutions to the domestic private sector, amounted to about 10½ per cent. This ratio then rose rapidly between 1980 and 1984 to reach a level of 24½ per cent in the third quarter of 1984, but during the recession of 1984-1986 this strong rise came to an end. Consumer credit extended by banks and other monetary institutions as a percentage of their total credit extension to the domestic private sector nevertheless still amounted to almost 19½ per cent in the period 1985 to 1994.

In contrast, the share of mortgage advances to households relative to total credit extended to the private sector by banks and other monetary institutions declined from a high level of nearly 38 per cent at the beginning of the 1970s to a low of approximately 25 per cent for the period 1982 to 1985. This ratio subsequently rose again to an average of 38 per cent in 1994.

If mortgage lending to households is added to the consumer credit aggregates provided by banks, total outstanding credit extended to the household sector by

³ From an analytical point of view, the consolidation of short and longer term debt, and the substitution of mortgage loans for the shorter term consumer credit will obscure short term movements in credit. This could be detrimental to the effective application of monetary policy.

Graph 1. Household debt as a percentage of total private sector credit

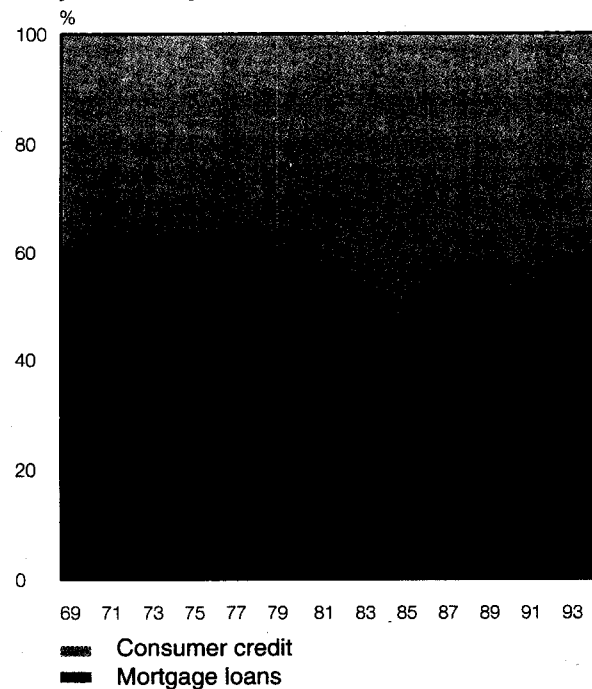


banks and other monetary institutions as a percentage of total credit extension by these institutions to the domestic private sector amounted to an average of 41½ per cent during the 1970s. This ratio rose to some 48 per cent at the end of 1984, mainly due to relatively sharp increases in consumer credit. Although this ratio edged downwards to about 46½ per cent during the mid-1980s it increased again to 55½ per cent in 1994. Contrary to the trend at the beginning of the 1980s, the growth rate in mortgage advances at the beginning of the 1990s rose faster than that of consumer credit extended to households.

4.2 Composition of household debt

Graph 2 reflects the composition of household debt from 1969 to the end of 1994. In the period 1969 to 1978 the share of mortgage debt as a percentage of total household debt varied, on average, around 62 per cent. Since the beginning of 1979 the relative importance of mortgage debt decreased and the ratio of consumer credit to aggregate household debt rose accordingly from about 39 per cent at the beginning of 1979 to 55

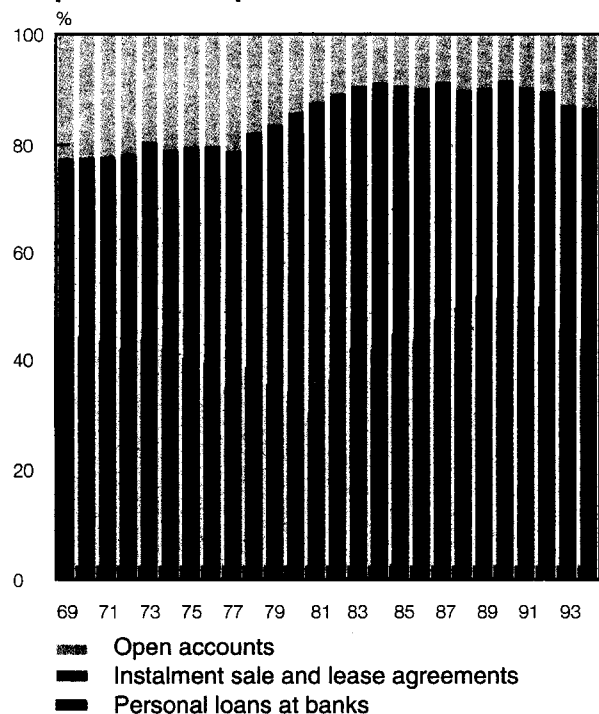
Graph 2. Composition of household debt



per cent in the second half of 1984. This could mainly be attributed to the sharp increase in consumer credit, which rose at an annual rate of 31½ per cent from 1979 to 1984 compared with an increase of only 17½ per cent in the case of mortgage debt. From 1985 the importance of consumer credit changed substantially as several factors caused a slowdown in the expansion of consumer credit. The net result of these developments was an increase in mortgage debt relative to total household debt, reaching a high of more than 57 per cent during 1988. This ratio decreased again to 51½ per cent in the fourth quarter of 1990, but the relatively buoyant demand for mortgage advances since 1991 again resulted in a sharp increase in the share of mortgage debt to total household debt. In 1994 this ratio rose to 60½ per cent, which is only slightly less than the average of 62 per cent registered during the 1970s.

Graph 3 shows the changes in the composition of outstanding consumer credit since 1969. From this graph it is apparent that the relative importance of credit extended by way of open accounts in total consumer credit decreased sharply over the period 1969 to 1994. From the fourth quarter of 1969 the relative share of open accounts in total consumer credit declined from 22½ per cent to a level of less than 9 per cent in 1990. However, since the middle of the 1980s aggressive marketing of open accounts and ready availability of such financing to a broader spectrum of consumers helped to stabilise the share of open-account balances in total consumer credit. In the current economic recovery since the middle of

Graph 3. The composition of consumer credit



1993 the credit on open accounts increased sharply and its share in consumer credit rose to an average of 14½ per cent in 1994.

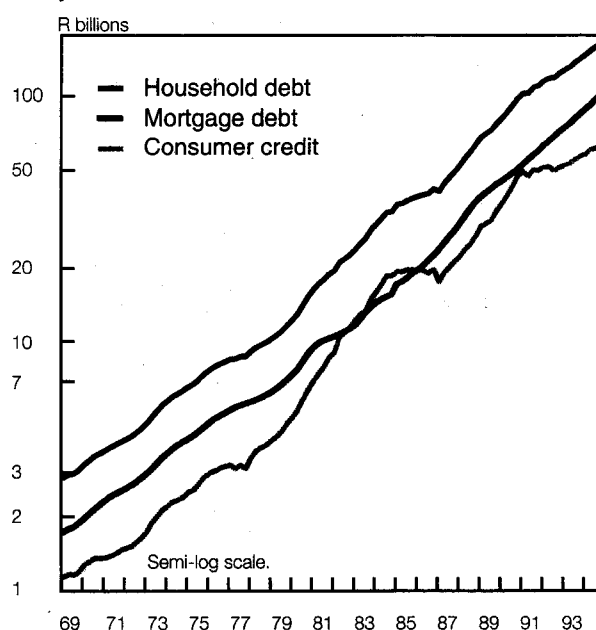
In contrast with the smaller relative share of open accounts in total consumer credit, the importance of instalment sale and lease transactions increased considerably during the 1970s and early 1980s. In 1969 approximately 31 per cent of all consumer credit extended to households took the form of instalment sale and lease transactions. This percentage increased to about 55 per cent in 1982, but subsequently declined and amounted to 42½ per cent during 1993 and 1994.

Up to 1982 credit granted to households by way of personal loans increased considerably more slowly than total outstanding consumer credit. As a result the relative importance of personal loans declined from 46 per cent in 1969 to 32½ per cent in 1981. Since 1982, however, personal loans increased more rapidly than total consumer credit. In 1990 personal loans once again constituted about 54 per cent of total consumer credit, before declining in the ensuing four years to an average of 43½ per cent in 1994.

4.3 Long-term trend in household debt

Estimates of aggregate household debt indicate a rise from R3,1 billion in the fourth quarter of 1969 to R166,5 billion at the end of 1994 (see Graph 4). This amounted to an average annual growth rate of about 17 per cent. The growth in household debt during this period,

Graph 4. Household debt



however, differed considerably and three separate sub-periods can be distinguished, viz. from 1969 to 1979, from 1980 to 1984 and from 1985 to 1994.

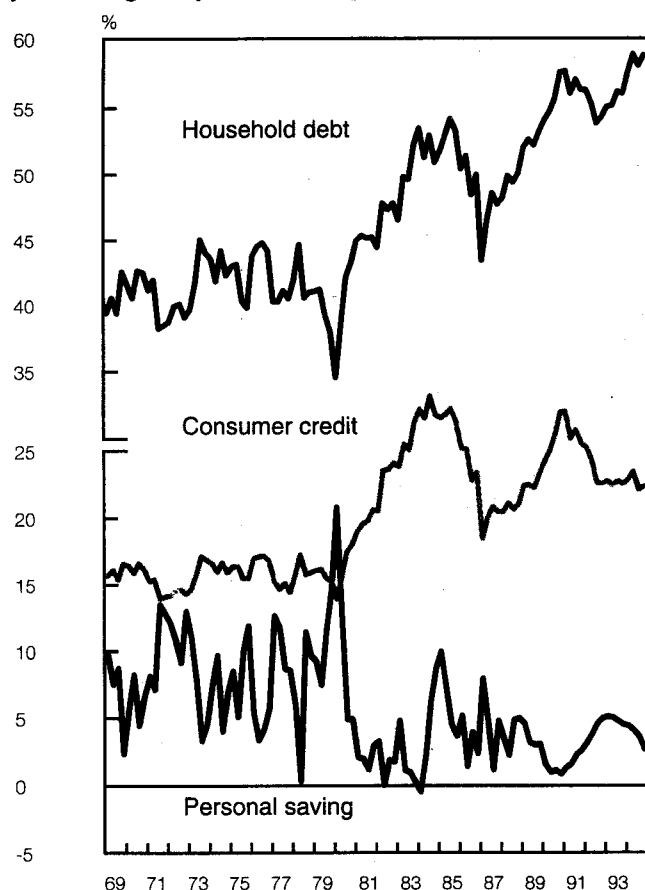
In the period 1969 to 1979 aggregate consumer and mortgage debt increased at an average annual rate of about 14 per cent. During the period 1980 to 1984 household debt accelerated to an annual increase of 22 per cent, mainly because of a sharp acceleration of no less than 30½ per cent per year in the rate of increase in consumer credit, but also because of a slightly higher growth of about 15 per cent per year in the outstanding mortgage debt.

By the middle of the 1980s the growth rate in consumer credit slowed down again (see Graph 4), leading to an average annual growth rate of 14 per cent in the years 1985 to 1994 – well below that of the first half of the 1980s. However, this slowdown was partly neutralised by the increased demand for mortgage credit. Consequently, the average annual rate of increase in household debt was slightly higher than its long-term average of 17 per cent for the period 1985 to 1994.

4.4 The household sector's indebtedness

During the period 1969 to 1978 the household sector's indebtedness, particularly in the form of mortgages and consumer credit, increased at a rate that more or less corresponded with the rate of increase in the disposable income of households. As a result, the ratio of outstanding debt to disposable income of households remained virtually unchanged and varied around an

Graph 5. Household debt and personal saving as percentage of personal disposable income



average rate of approximately 41 per cent (see Graph 5). During the period 1978 to 1980 indebtedness rose even slower than disposable income. However, this tendency was reversed in the period 1980 to 1984. Also, the sharp increase in the outstanding consumer credit was not accompanied by an equally sharp increase in the disposable income of households. The ratio of consumer credit to disposable income consequently increased to

an average of 28 per cent in 1984. Aggregate household debt, as a percentage of disposable income, rose from an average of 39½ per cent in 1980 to 52 per cent in 1984.

Because of the noticeable slowdown in consumer credit extended during 1985 to 1986 as a result of strict monetary policy measures, the ratio of consumer credit to personal disposable income receded sharply to 20 per cent in 1987. The use of consumer and mortgage credit subsequently accelerated sharply and since the beginning of 1993 the ratio of household debt to disposable income has exceeded the high levels of the mid-1980s.

An international comparison shows that at the end of 1994 consumer instalment credit in the United States of America and the United Kingdom amounted to 19 per cent and 12 per cent of the disposable income of households, compared with only 10 per cent in South Africa. Although these percentages are higher than in South Africa, instalment credit actually constitutes a comparatively small part of all consumer credit in these countries. For instance, the credit demand pattern of consumers in the USA changed over the past eight years as households enjoyed the benefits of other loans of which the costs are relatively low. Mortgage loans in particular replaced the other kinds of credit and in the third quarter of 1994 consumer credit constituted 22 per cent and mortgage debt 78 per cent of the total household debt in the USA,⁴ whereas consumer credit in South Africa amounted to 39 per cent and mortgage debt to 61 per cent of total household debt.

During the period 1970 to 1985 households' outstanding mortgage debt in South Africa remained on a level that was equal to about 25 per cent of personal disposable income. Subsequently, the demand for mortgage loans increased in South Africa, as in various other countries, and mortgage debt in relation to personal disposable income rose to about 36 per cent in 1994. This ratio is expected to increase in the medium to long run as increasing numbers of South African households gain access to mortgage facilities.

⁴ Canner, G.B., Kennickell, A.B. and Lockett, C.A.: Household Sector Borrowing and the Burden of Debt, *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, Washington, D.C., USA, April 1995.

Table 1. Mortgage loans to households as a percentage of personal disposal income

	1981	1983	1985	1987	1989	1991	1993
Canada.....	50	47	46	55	59	64	68
Japan	32	35	36	40	46	48	...
South Africa.....	25	24	25	27	30	30	33
UK	35	47	52	64	73	79	77
USA.....	48	47	50	59	64	66	68

... Denotes not available

Source: OECD Economic Outlook, December 1994

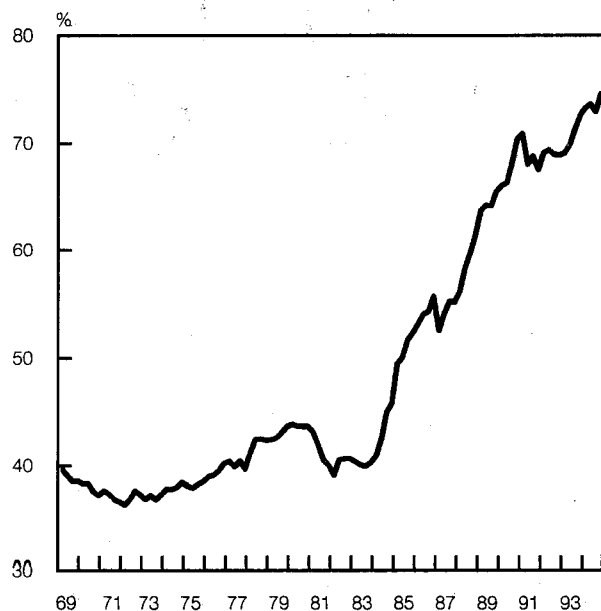
4.5 Household debt relative to real assets

The deterioration of households' indebtedness since the early 1980s is also discernible in the ratio between aggregate consumer debt and the estimated value of real assets, particularly in the stock of private residential buildings and durable consumer goods. Between 1969 and 1984 the debt ratio fluctuated around an average of 40 per cent. From 1984, however, this ratio deteriorated further and reached a high of 71 per cent in the first quarter of 1991 (see Graph 6). This ratio subsequently edged downwards to an average of 69 per cent in 1992 before it rose again to reach a new high of 76 per cent in the fourth quarter of 1994.⁵

The growth of indebtedness since the mid-1980s could be attributed to the deregulation of financial institutions, which is believed to have encouraged an expansion of personal debt, and the strong demand for residential mortgage loans, spurred by inflation and the subsequent rise in house prices as well as other factors, such as the aggressive marketing of sectional-title units and the initial development to boost owner-occupied dwelling units among certain lower-income communities. In addition, the household sector's indebtedness,

⁵ The level of this ratio will be lower with the inclusion of financial assets in the debt-to-asset ratio. Unfortunately, the outstanding balances of some household assets, such as stocks, were not available and the calculations used in the current analysis provide only approximate estimates to evaluate the indebtedness of households in South Africa.

Graph 6. Ratio of household debt to real assets



particularly in the form of mortgages, rose much faster than disposable income in the second half of the 1980s and at the beginning of the 1990s because of low to negative real after-tax interest rates on investment during a period in which inflation expectations remained at a high level and the fact that interest rates on mortgage loans for dwelling units declined sharply between the end of 1985 and the end of 1987 and again from the beginning of 1991. Aggregate mortgage advances to the private sector rose from an increase over twelve months of 14½ per cent in December 1990 to an average of 17½ per cent in the ensuing three years. These growth rates in mortgage advances were higher than the average increase in consumer prices during this period. This could be related to a slower repayment of capital, an increase in the value of real estate transactions, increased usage of this facility to finance consumer expenditure, and the lower interest charged on mortgages. Lower capital requirements against mortgage advances also induced banks to promote this kind of credit extension.

From the middle of 1991 the deterioration in the aggregate debt ratio of households levelled off. This could be attributed to a slowdown in the rate of increase in consumer credit which had a cushioning effect on the relatively higher increases in mortgage advances.

The relatively softer trend in the debt ratio of households between 1991 and the beginning of 1993 reflects, *inter alia*, a lack of confidence in the economy as a consequence of the drawn-out recession, political instability and the high level of violence. In general, it appears that consumers' perceptions of the economy influenced their borrowing behaviour significantly. Therefore, the large debt burden of households in South Africa and probably subjective feelings about economic conditions in the future could have contributed to the slowdown of consumer credit in the early 1990s. However, the revival of real economic growth during 1993 and 1994 and the relatively positive developments that resulted from the new political dispensation helped to re-establish households' confidence in the economic prospects of the country. This undoubtedly led to increased recourse to consumer credit and mortgage facilities during the initial stages of the current cyclical upswing in the economy. A heavy debt burden, as reflected by the current estimates, means that consumers have already used a substantial amount of future income and, hence, have less future income available for consumption. They are likely to reduce current consumption in order to repay debt faster in an effort to smooth consumption over time.

4.6 Household debt and personal saving

Personal saving is defined as the amount by which the current income of households exceeds their current expenditures. Dissaving occurs when current expenditures exceed current income. In terms of standard accounting practices, the saving of a household or of any other organisation will be equivalent to the

increase in the net asset value of the household or organisation. Increases in the credit commitments of households will accordingly give rise to a decline in the saving of households, unless this is counteracted by similar or stronger increases in the assets of households. Generally speaking, an inverse relationship between increases in the utilisation of consumer credit and the saving of private households can be expected over time.

In Graph 5 the inverse relationship between the ratio of outstanding consumer and mortgage credit to personal disposable income and the ratio of personal saving to personal disposable income is illustrated. The deterioration in the savings ratio of households at the beginning of the 1980s coincided with the greater use of credit by private households. The lower level of the savings ratio in the 1980s and early 1990s is also reflected in the higher level of the ratio of household debt to disposable income of households.

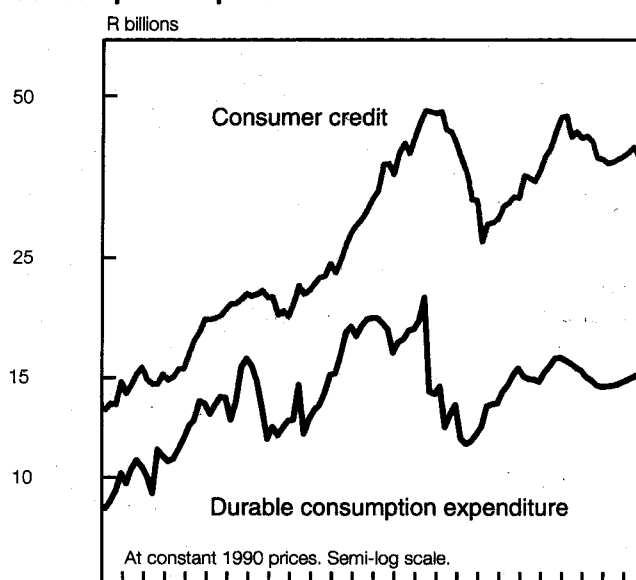
This relationship was also observed in other countries in the 1980s. Moreover, in a number of countries the sharp rise in the prices of assets, such as fixed property and shares, caused the wealth of households to increase and also increased their ability to borrow. Households consequently turned to credit to finance consumption spending and the savings ratio receded to lower levels (see accompanying Table).

4.7 Consumer credit and spending on durable consumer goods

Various credit instruments used by households are very suitable for financing the purchase of goods of which the price is relatively high compared to the consumer's income and of which the expected economic lifetime is fairly long. It can therefore be expected that changes in the spending of households on durable consumer goods will have an impact on changes in outstanding consumer credit.

The relationship between the spending of households on durable consumer goods and outstanding consumer credit is presented in Graph 7. From this graph it appears as if strong increases in the purchases of

Graph 7. Consumer credit and private consumption expenditure



Deviation from long-term trend line

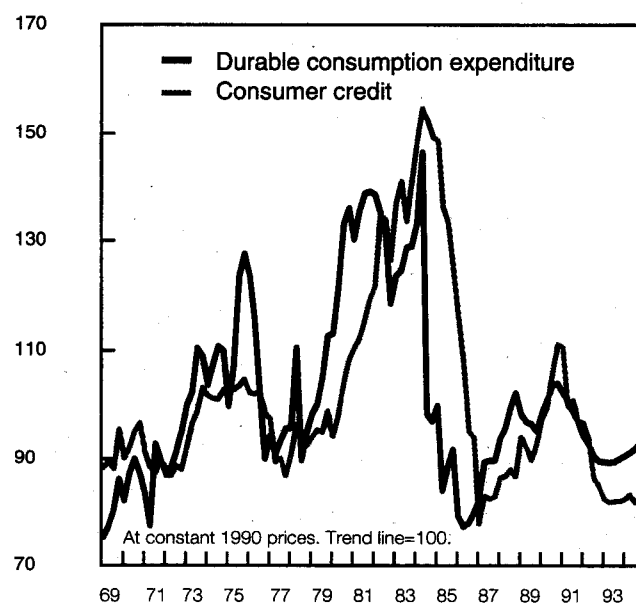


Table 2. Saving as percentage of disposable income of households

	1980	1985	1990	1993
France.....	17,6	14,0	12,5	14,1
Italy	21,9	18,9	18,2	16,8
Japan.....	17,9	15,6	14,1	15,0
South Africa	10,9	6,3	1,1	4,8
United Kingdom.....	13,4	10,7	8,4	12,2
United States of America	8,1	6,6	4,3	4,6

Source: OECD Economic Outlook, December 1994

durable consumer goods are normally accompanied by strong escalations in consumer credit. In the lower section of Graph 7 the deviations from the long-term trend in real consumer spending on durable consumer goods are presented together with the deviations from the long-term trend in real consumer credit (i.e. consumer credit deflated with the deflator for private consumption expenditure). This shows that the cyclical changes in outstanding consumer credit generally

corresponded with the cyclical changes in private consumption expenditure on durable goods, but with a certain time lag.

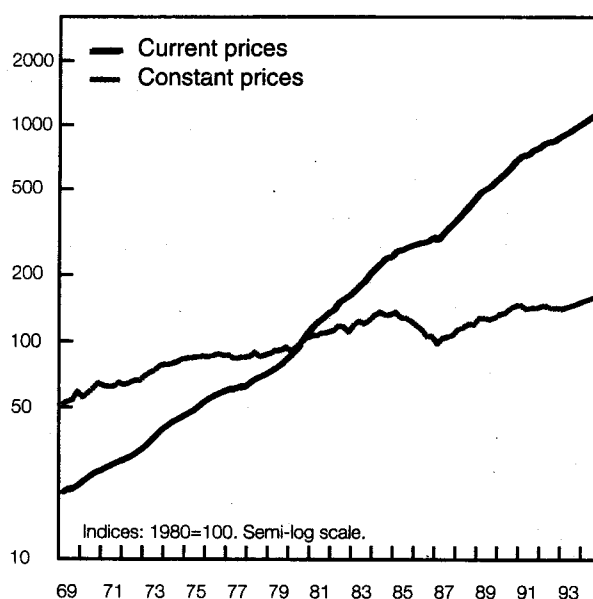
4.8 Household debt and consumer prices

In the period 1969 to 1979 the average annual growth in the credit extended to households was considerably faster than the increase in consumer prices and outstanding real household debt grew at an average annual rate of 5½ per cent. The termination of the direct control system over the lending activities of banks at the end of 1980 and the perception in the community that general price increases in South Africa will remain high, caused the expansion of especially consumer credit to accelerate noticeably from 1980 to 1984. Because the prices of durable goods and residential property also rose sharply relative to the prices of other consumer goods and services, the outstanding real household debt increased at an annual average rate of 6½ per cent and, importantly, real consumer credit increased by no less than 13½ per cent per year in this period. With the uncertain political conditions that prevailed in the country in 1985 and 1986 and the high cost of borrowed funds, households preferred to consolidate their debt positions. However, the slowdown in the growth of credit demand by households while prices continued to rise at a high rate, caused the outstanding *real* household debt to contract by 18 per cent between 1984 and 1987. With the exception of a slight moderation in 1991 and 1992, the household debt again increased, in nominal terms, more rapidly than the prices of consumer goods since 1987. Real household debt increased at an annual rate of 6½ per cent from 1987 up to the fourth quarter of 1994.

4.9 Household debt and the business cycle

Since 1969 outstanding housing debt has shown a strong upward trend, but in the shorter term there were clear and fairly regular deviations from the longer-term

Graph 8. Household debt



growth trend. Four cyclical movements can be identified in housing debt over this period, which to a large degree coincided with the general course of the business cycle and in particular with the cyclical movements in private consumption expenditure on durable goods and investment in real estate by households. The accompanying table shows the upper and the lower turning-points of the cycle in outstanding housing debt together with the identified turning-points of the business cycle.

Table 3. Turning-points in consumer credit and mortgage financing and the business cycle

Reference turning-points:	Peak	4/70	3/74	3/81	2/84	1/89			
	Trough	3/72	4/77	1/83	1/86	2/93			
Deviation from specific turning-point number of quarters (leads-, lags+)									
Consumer credit									
Open accounts		+2	+5	+6	+3	+5	+8	+6	0
Personal loans.....		+1	-2	+8	-	-	+1	+4	+6
Instalment sale and lease transactions		-1	-3	+1	-	+2	+2	+10	+7
Total	0	0	-3	0	-	-	+1	+4	+7
Mortgage loans.....	+1	0	0	+6	-1	0	-2	+2	0
Household debt	-1	-1	-1	+6	-	-	+1	+4	+8

In the 1970s the turning-points in the household debt cycle, and in particular those of consumer credit and mortgage loans, slightly preceded, or more or less coincided with, those in the general business cycle. However, the increase in consumer credit in the early 1980s had so much momentum that the decline in general economic activity in the period 1981 to 1983 did not affect its growth, while mortgage advances showed a clear cyclical movement in this period. However, since the upper turning-point in the business cycle in the second quarter of 1984, the turning-points in the cyclical movements of mortgage loans did not show a consistent relationship with the turning-points of the business cycle, whereas the cyclical movements of the outstanding consumer credit followed the business cycle with a time delay. The lag was observed in open accounts, personal loans, instalment sale and lease transactions. The lag in consumer credit vis-à-vis the turning-points in the general business cycle can probably be ascribed to the observed lag between the cyclical changes in durable consumption expenditure and consumer credit (see Graph 7) and the fact that consumers tried to maintain their established spending patterns despite the change in their income position – their unwillingness to adapt consumption to changed circumstances was echoed in their increased use of consumer credit facilities. In addition, there was also some distress borrowing as interest costs were capitalised by households following the relatively high real interest rates in the boom period and early recession phases in 1984/85 and 1989/90.

5. Factors that contribute to changes in the use of consumer credit

Households make use of consumer credit to bridge deviations between their income flows and their demand for consumer goods. Such credit helps them to extend the payments burden resulting from the purchase of expensive consumer goods which they will be using for several years. The use of consumer credit is thus determined largely by changes in expenditure on consumer goods by private households. Private consumption expenditure is, in turn, strongly influenced by the current and anticipated disposable income of households, the asset holdings of households and changes in the market value of their assets, the cost of credit, the age distribution of consumers and regulatory measures and other conditions that influence the availability of credit.

5.1 Personal disposable income

In ideal conditions in which consumers are able to anticipate the future with complete accuracy, they will plan their spending in such a manner that they are able to

maintain a steady stream of expenditure over time.⁶ Under such circumstances it can be expected that in times of rapid increase in real disposable income, saving and the accumulation of assets will be strengthened, debt will be redeemed and less consumer credit will be used in the short term. When real income increases more slowly, or even declines, households will in the short term turn to their savings and make greater use of consumer credit in order to maintain consumption expenditure at the desired level. In the longer term ratios such as the average propensity to consume, the savings ratio and the ratio of outstanding consumer credit to disposable income should be fairly constant under these conditions, except in cases where exceptional events disrupt the normal course of affairs. It can therefore be expected that under circumstances where the future changes in disposable income can be predicted with a large degree of accuracy, consumer credit in the longer term will change at much the same rate as the disposable income of households, with some short-term divergences.

As already indicated, the changes in outstanding consumer credit and the changes in disposable income were virtually the same in the period 1969 to 1979, which leaves the impression that consumers were fairly certain in that period of the expected long-term growth in their disposable income. Between 1969 and 1979 the disposable income of households and outstanding consumer credit both increased at an average annual growth rate of nearly 14½ per cent. No systematic change in the ratio of outstanding consumer credit to the income of households therefore occurred during those years. The short-term deviations from the longer-term trend in the ratio coincided to a large extent with the general course of the business cycle. Personal saving by households during that period also varied around a constant level of 8 per cent of current disposable income of households.

In the years after 1980 other factors, besides the income and anticipated income of households, became relatively important and started to exert a strong influence on the use of consumer credit. The ratio of consumer credit to the disposable income of households was therefore continuously higher than during the 1970s.

5.2 Asset holdings of households

In the advanced stage of the cyclical upturn from 1979/1980 the South African economy experienced an exceptionally prosperous period. These years were characterised by a high level of domestic economic

⁶ This does not imply that the average propensity to consume is the same for all people or for all time periods. In particular, the value of the average propensity to consume for an individual household may depend on the age and composition of the consumer unit, the ratio of wealth to disposable income, fluctuations of income around its mean, the rate of interest and other relevant factors.

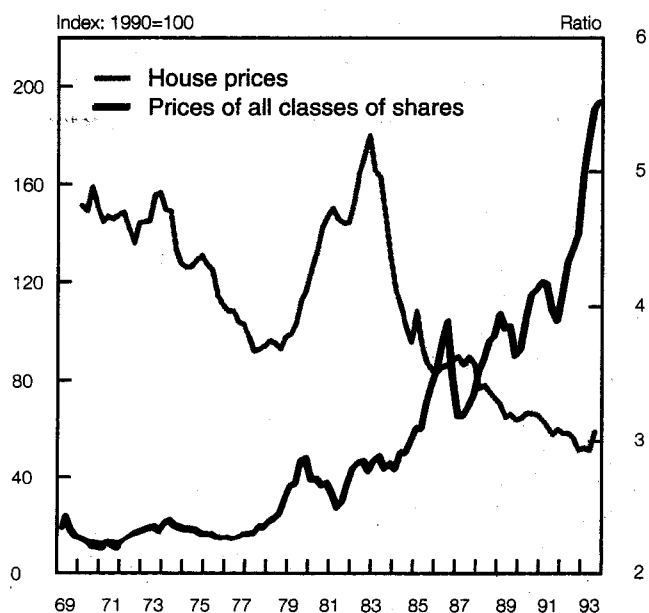
activity, substantial increases in the prices of gold and international commodities as well as a booming foreign trade. Under these circumstances the mood was one of general optimism. The sharp increase in the values of assets owing to the potentially higher yield on investments and inflation contributed further to the psychosis that wealth would continue to gain in value.

In the first few years of the 1980s, both the rise in the prices of houses and that of listed shares (see Graph 9) contributed much to the perception of growing prosperity among households. This in all probability contributed to the increased use of credit, despite the weaker growth in their disposable income.

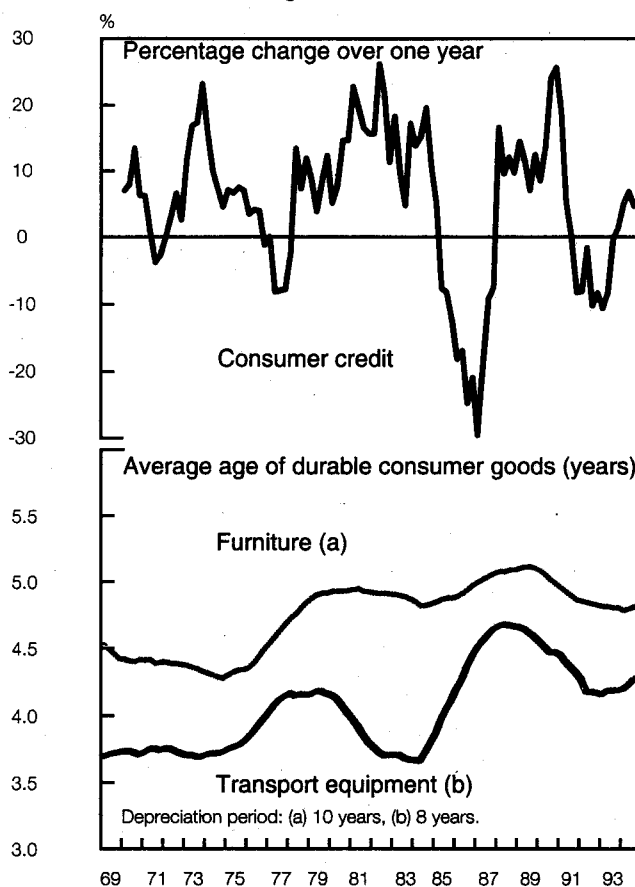
After the period of debt consolidation during the uncertain political circumstances of 1985 and 1986, it was particularly the wealth effect of the steady rise in the prices of listed shares that was conducive to the strengthening of consumer confidence and the increasing use of consumer credit and mortgage loans in the second half of the 1980s.

It is also significant that the sharp increases in the use of consumer credit at the beginning of the 1980s and later in 1987 were preceded by fairly sharp increases in the average age of assets such as furniture, transport equipment and other durable goods of households (see Graph 10). The necessity of replacing aging household assets could therefore also have contributed to the greater use of consumer credit by households.

Graph 9. Share prices and the ratio of average house prices to average remuneration per white worker



Graph 10. Real consumer credit and average age of durable consumer goods

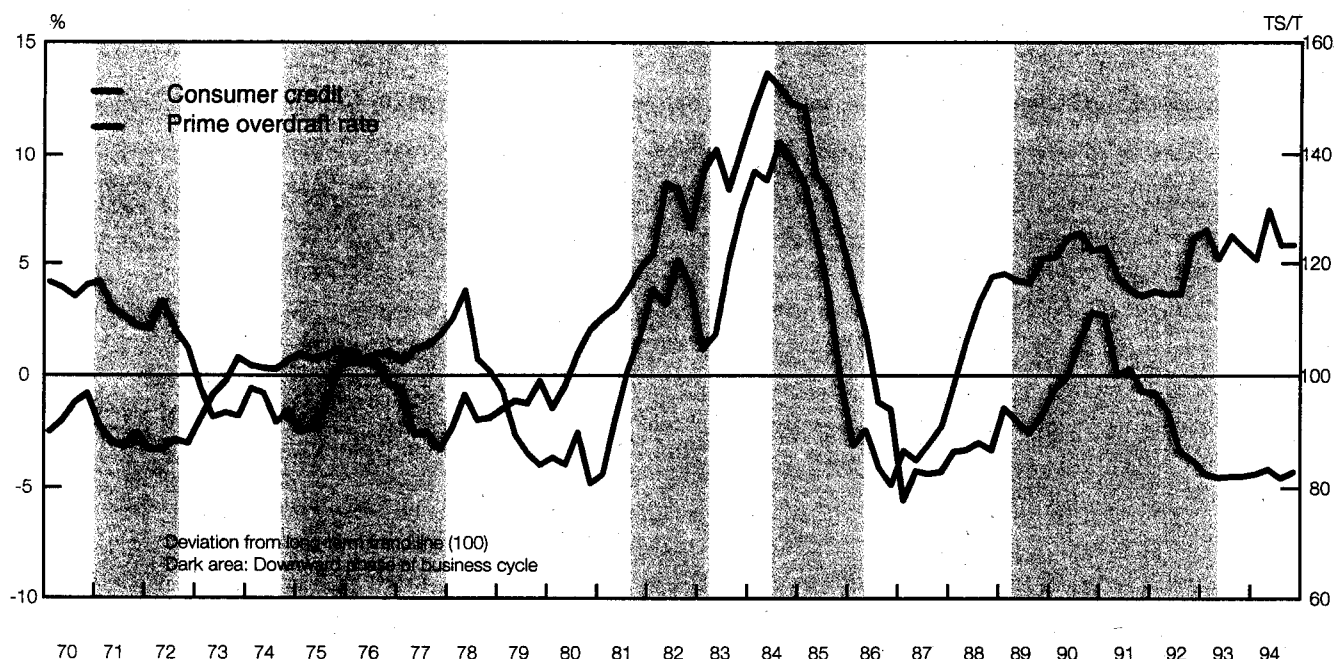


5.3 The cost of credit

The changes in the cost of credit are an important factor which could influence households' demand for credit. Although nominal interest rates are frequently used as an indicator of the cost of credit, the cost of credit in real terms is, in the last instance, the more important factor. High nominal interest rates will not necessarily encourage consumers to constrain their demand for consumer credit. If consumers expect that future price increases will take place at a faster rate than the prevailing level of the nominal lending rates, they will still benefit by using credit and redeeming their debt over a future period. Only when consumers are convinced that the prevailing level of interest rates is higher than the expected increase in prices, will they regard it as being to their advantage to defer their consumption and to give priority to interest-bearing investments.

In the 1970s the fairly low costs of credit in South Africa during the cyclical upswings in 1973/74 and 1979/81 gave rise to increases in the demand for consumer credit. However, Graph 11 indicates that

Graph 11. Cyclical trend of real consumer credit and real cost of financing



since 1981 increases in the real cost of credit did not have a restraining effect on the use of consumer credit. Similarly, the declines in the real cost of credit in certain years did not give rise to accompanying accelerations in consumer credit. In fact, the graph indicates that increases in the real interest rate coincided with the increased use of consumer credit and that declines in the real interest rate went hand in hand with the declining use of consumer credit.

This perverse relationship must not however, be regarded as evidence of the inefficiency of the interest rate mechanism in regulating credit. Firstly, in calculating the real interest rate, the observed inflation rate was used, which does not necessarily reflect inflation expectations. In addition, it can be expected that fairly long time delays exist between the change in lending rates and the change in the use of consumer credit. It is therefore possible to effect an inverse relationship in Graph 11 simply by making a time shift in the line presentation of the cyclical course of consumer credit. Furthermore, changes in the level of the interest rate on private credit transactions are strongly influenced by the official lending rates of the monetary authorities. If the monetary authorities respond with an increase in their discount and lending rates when the total demand for credit expands, or when they lower the official rates under circumstances where the demand for credit slows down, the relationship between the demand for credit and the changes in the cost of credit will be positive. This does not imply, however, that the demand for credit responds in an abnormal manner to adjustments in the

prevailing level of interest rates. In spite of the seemingly positive relationship, it can be assumed that together with the influence of other factors, the relatively high real interest rates during the past four years exercised a restraining effect on the demand for consumer credit. This clearly provides proof that monetary policy should be conducted within a longer-term framework rather than being directed at influencing strategic economic aggregates in the short term.

5.4 Age distribution of the population

The extent to which consumers make use of consumer credit and mortgage loans is also influenced by the age of the consumer. Younger consumers embarking on their careers usually have a high preference for consumption expenditure. As their careers progress their demand for housing, and therefore for housing finance, increases. At a later stage saving and provision for retirement take on greater importance. During their retirement years accumulated funds, or dissaving, are used for their livelihood.

Communities with a large section of the population in the younger age groups are likely to have a high ratio of household debt to disposable income. This ratio will normally be even higher in a community with a rapid rate of population growth, which will cause the share of the younger age groups in the total population to increase gradually.

In South Africa the section of the population in the age group 25 to 44 years increased from 25½ per cent in 1970 to 28½ per cent in 1991. The increase in the share

of the younger consumers in the total population, with their greater preference for consumer credit, could have contributed to the longer-term rise in the debt ratio of private households. This implies that the deterioration in the personal savings ratio in the longer term can also be attributed to the gradual increase in the share of the younger age groups in the population.

5.5 Direct control over credit extension

The availability of credit to private households was strongly influenced in the 1970s by the system of selective direct quantitative controls over the lending activities of registered banking institutions and other financial intermediaries. This system was known as bank credit ceilings and was in force in South Africa from 1967 to 1972 and from 1976 to 1980. This undoubtedly had a direct effect on the growth in outstanding credit.

The rapid expansion in outstanding consumer credit during the first half of the 1980s was facilitated by the lifting of direct control over credit extension in August 1980 and the adoption of a more market-oriented system of monetary policy-making since 1981.

5.6 Control over deposit rates

Another form of direct control which could have influenced the extension of consumer credit, was the application of deposit rate control between 1965 and 1980. This system led to the channelling of funds to more attractive investments outside the banking system, discouraged saving and disadvantaged the smaller savers as they did not have ready access to investment opportunities outside the banking system. The inadequate yield on savings during the 1970s, which was the direct consequence of deposit rate control, could have contributed to a higher level of consumption expenditure than would otherwise have been the case and therefore also to the greater use of consumer credit.

5.7 Control over lending rates

Except for deposit rates, the interest rates applicable to various kinds of loans and credit were over the years also subject to official upper limits, whether at a statutory level or on an informal basis. Control over lending rates concentrated on the banks' prime rate for overdrawn accounts, the statutory maximum rates for loans and credit transactions for certain prescribed amounts (which was introduced in terms of the Limitation and Disclosure of Finance Charges Act of 1968 – the so-called Ladofca rates – currently the Usury Act), and the mortgage rate of the building societies.

These statutory rates caused problems for consumers because of lengthy delays in the adjustment of these rates following changes in market rates. Banks therefore tended to restrict their loans to prime clients. These clients borrowed funds at rates that were lower than the appropriate upper rate, and lower income-earners, for whom the rates had to be suitably higher, found it difficult to obtain financing for consumption expenditure. Because

of these problems, the maximum statutory rates have been linked to the banks' prime overdraft rate since 1983.

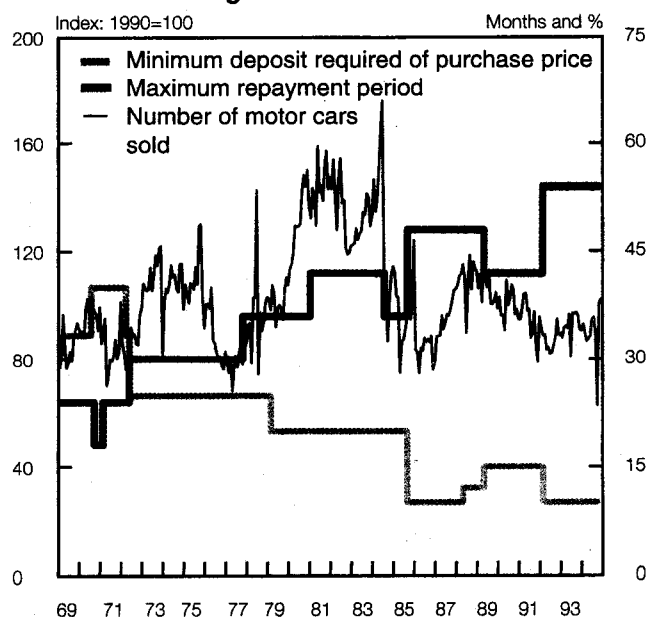
In the case of the prime rate an official link was maintained in the 1960s and 1970s according to which the banks' prime overdraft rate was fixed at a predetermined margin above Bank rate. Although this link was abolished in February 1982, the banks carried on with this convention. The general deregulation of the financial sector in the 1980s, however, eliminated many restrictions on the lending activities of banks. Although the effect of these developments cannot be quantified, they undoubtedly contributed to the rapid increases in outstanding consumer credit during the first half of the 1980s.

5.8 Regulation in terms of the Credit Agreements Act

In terms of the Credit Agreements Act of 1980, the Minister of Trade and Industry prescribes the maximum period during which the full price of a purchase has to be paid in terms of a credit agreement. The portion of the cash price that is required as deposit and the kind of goods that can be financed by means of credit agreements are also prescribed by the Minister. The purpose of the Act is to protect consumers against the risks of incurring too large a burden of indebtedness and to regulate credit purchases in general.

These measures have an important influence on consumers' purchases of durable goods. As is apparent from Graph 12, the purchase of new motor cars, for instance, is encouraged or discouraged depending on

Graph 12. Sales of new motor cars and instalment sale agreements



the degree of restrictiveness of instalment sale conditions. In contrast, the efficiency of the market-oriented monetary policy measures is frequently questioned as in many cases consumers are supposedly less sensitive to increases in the interest rate or adjustments in financing costs. Their decisions to buy on credit are determined mainly by the affordability of the regular instalment.

Owing to the prescriptive nature of these direct control measures, the sales of certain durable consumer goods, for instance motor cars, were frequently adversely affected when instalment sale conditions were tightened.

6. Summary and concluding comments

The estimates of outstanding household debt presented in this overview indicate a strong rise in the debt-to-income ratio of private households during the first half of the 1980s. After having varied only slightly around an average rate of approximately 41 per cent in the 1970s, the ratio of household debt to personal disposable income rose to an average of 53 per cent in 1985. At the beginning of the 1990s this ratio again rose sharply and reached a high of more than 58 per cent in 1994. An analysis of the two major components of consumer debt, namely consumer credit and mortgage advances, shows that the latter, as a ratio of personal disposable income, averaged 25½ per cent during the 1970s. Although this ratio remained relatively stable during the first half of the 1980s, it increased noticeably towards the end of the 1980s and amounted to an average of approximately 35½ per cent in 1994.

Likewise, the ratio of consumer credit to personal disposable income varied only slightly around an average rate of about 16 per cent in the 1970s and increased to an average of 28 per cent in 1984. In particular, bank-intermediated credit increased very rapidly in the first half of the 1980s. Credit extended by banks to private households increased as a percentage of total outstanding consumer credit from 50½ per cent in the 1970s to almost 80 per cent in 1984. From about the middle of the 1980s, however, the more aggressive marketing, and easier availability of open-account financing to a much wider variety of consumers prevented a further decline in the share of open-account balances in the total outstanding consumer credit, and caused the relative share of bank-intermediated credit to stabilise. In the last half of the 1980s the ratio of consumer credit to personal disposable income at first receded sharply to an average of 20 per cent in 1987, before it rose again to the high level of 27 per cent in 1991.

The increased importance of bank-intermediated credit to households in the first half of the 1980s and the greater flexibility in household mortgage advances since the beginning of the 1990s seems to indicate that the

rising household debt burden was partly caused by financial deregulation and the liberalization of financial markets during these periods. Inflation and rising household asset values added to this increase in households' indebtedness. Initially the rising debt burden was not perceived as a problem since a fall in household asset prices was seen to be highly unlikely in an inflationary environment. However, during the current recession the growth of personal disposable income slowed down substantially, while conservative financial policies aimed at bringing inflation down, exerted continued downward pressure on the values of household assets in general. Existing debt levels thus became unsustainable. Household borrowing consequently slowed down towards the end of the 1989/93 cyclical downturn. In addition, the ratio of saving to disposable income rose moderately. Current estimates, however, suggest that the rate of increase in household debt from the beginning of 1993 again exceeded the growth rate in personal disposable income as the ratio of household debt to personal disposable income rose to an average of 58½ per cent in 1994.

Although the estimated outstanding household debt totals are very approximate indicators of overall household debt, they do provide valuable information for assessing the likely impact of monetary policy changes on aggregate consumer spending. In addition, further research to step up the initial estimates of household debt, together with estimates of the total value of interest-bearing assets held by households, will provide a complete framework for a more accurate analysis of the possible links between monetary policy changes and the saving and spending decisions of private households.

References

- Canner, G.B. Kennickell, A.B. and Luckett, C.A. 1995. Household Sector Borrowing and the Burden of Debt. *Federal Reserve Bulletin*, Vol. 81, April, pp. 323-338.
- Eugeni, F. 1991. Consumer debt and home equity borrowing. *Economic Perspectives*, Federal Reserve Bank of Chicago. March/April, pp. 2-13.
- Kopcke, R.W., Munnell, A.H. and Cook, L.M. 1991. The influence of housing and durables on personal saving. *New England Review*, Federal Reserve Bank of Boston. November/December, pp. 3-16.
- Luckett, C.H. and August, J.D. 1985. The Growth of Consumer Debt. *Federal Reserve Bulletin*. June, 1985, pp. 389-402.
- Meijer, J.H. 1989. *Monetary Policy and the Instruments of Monetary Policy*. (In Falkena, H.B., Fourie, L.J. and Kok, W.J. eds. *The Mechanics of the South African Financial System*. London: The Macmillan Press Ltd.)

- Montplaisir, M. 1992. Developments in the balance sheet of the household sector over the past two decades. *Bank of Canada Review*. July, pp. 3-14.
- Organisation for Economic Co-operation and Development. 1994. *OECD Economic Outlook*. December.
- Pearce, D.K. 1985. Rising Household Debt in Perspective. *Economic Review*, Federal Reserve Bank of Kansas City. July/August, pp. 3-17.
- South Africa (Republic). 1985. The Monetary System and Monetary Policy in South Africa. *Final Report of The Commission of Inquiry into the Monetary System and Monetary Policy in South Africa*. Pretoria: Government Printer. (RP 70/1984.)
- South African Institute of Chartered Accountants. 1989. Statement RE 105, 1989. Accounting for Lease in the Financial Statements of Lessees. Accounting Practices Board, January.

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