Consumption Expenditure on Durables in Barbados 1960-82

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March 1985

In recent times we have witnessed constant efforts to control the level of consumer spending on durables in Barbados. The main reason for this was to direct the scarce foreign exchange earnings into the 'productive' sectors. This paper presents a model on consumer expenditure on durables in Barbados. In the model relative prices, income, hire-purchase terms, credi[illegible] and the ratio of durable consumption to income have significant effects on durables expenditure. This leads us to accept that both fiscal and monetary policy play a serious role in durables expenditure.

Consumption Expenditure on Durables in Barbados 1960-82

Over the last decade we have witnessed several attempts to control consumer expenditure on durables through selective credit controls and hire-purchase regulations. The controls were aimed at stabilizing the balance of payments as well as re-directing credit to the 'productive' sectors in the economy. It was also felt that controls on consumer expenditure would help to increase the savings ratio and make more funds available for imports of intermediate and capital goods. Were these policies 'correct' and did they achieve the desired goal? These are some of the questions we hope to answer from our analysis.

Consumer durables are an important component of imports of finished manufacturers. However, because of their 'non-productive' nature, they have been very susceptible to controls especially in countries with limited foreign exchange. Expenditure on durables is mainly credit-financed and may be affected by movements in credit availability, changes in hire-purchase arrangements and other monetary as well as fiscal variables. It is against this background that we set out to investigate durable consumption expenditure in Barbados. The next section reviews the methods of controlling durable expenditure during the review period as well as the movements in the level of durable imports and consumer instalment credit. This is followed by a presentation and analysis of a model which is used to test

the relative importance of the factors affecting durable purchases; here we also present and analyse the empirical results. Finally, we present the summary and conclusions.

Section 1

There were no credit controls during the pre-Central Bank era. However, firms did institute hire-purchase controls inasmuch as they required downpayments and gave specific amortisation periods. In most cases the downpayment was ten percent or less with a minimum repayment period of two years.

The advent of the Central Bank heralded selective controls and hire-purchase regulations[1] as measures to check the rapid expansion of consumer spending on durables.

These measures were deemed necessary in an effort to redirect credit to the agriculture, manufacturing and tourism sectors. The measures were also introduced in an effort to maintain a reasonable level of foreign exchange. On October 17, 1975, the Hire-Purchase, Credit-Sale and Hire-Control Act, 1975-84 came into force, giving the Central Bank the power under ministerial supervision to control all credit by way of hire-purchase, credit-sale and hiring agreements. Under the act specific guidelines were set for levels of downpayment and for repayment periods. Amendments were made to the act almost every year thereafter to stem the continued inflow of durables and to protect the balance of payments.

1. See Appendix 1 for a chronology of events.

Table 1

Consumer Credit

	(1) Instalment Outstanding $000	(2) Personal $000	(3) Col (1) ÷ Col (2) %	(4) Repayment $000	(5) New Agreements		(6) Net New Credit
					Number	$000	
1970	n.a	31,494	n.a	n.a	n.a	n.a	n.a
1971	n.a	36,161	n.a	n.a	n.a	n.a	n.a
1972	22,823	51,868	44.0	18,503	13,747	24,409	5,906
1973	29,610	56,779	52.1	24,772	15,401	30,803	6,031
1974	28,826	63,419	45.5	24,062	8,928	22,949	-1,077
1975	36,626	74,381	49.2	30,755	13,433	38,537	7,782
1976	45,953	88,248	52.1	35,942	14,595	44,627	8,685
1977	53,767	93,390	57.6	42,226	12,484	44,352	2,126
1978	55,832	106,850	52.3	42,996	13,265	44,993	1,997
1979	65,775	131,905	49.9	55,333	15,084	61,353	6,020
1980	62,408	135,006	46.2	52,557	11,015	47,973	-4,584
1981	62,455	139,26	44.8	49,202	9,485	49,800	598
1982	57,381	130,974	43.8	42,965	6,980	37,643	-5,322
1983	70,388	152,762	46.1	46,706	10,034	56,753	10,047

Source: Central Bank of Barbados: Annual Statistical Digest 1982.
Economic and Financial Statistics.

Table 2

Imports of Consumer Goods

	(1) Total $000	(2) Durables $000	(3) Col (2) ÷ Col (1) %	(4) Motor Cars	(5) Col (4) ÷ Col (2) %	(6) Col (4) ÷ Col (1) %	(7) Durables ($ 1980)
1970	97,454	20,230	20.8	8,935	44.2	9.3	42,500
1971	100,278	19,003	19.0	8,658	45.6	8.8	36,059
1972	119,040	20,663	17.4	1 0,209	49.4	8.3	37,365
1973	133,938	18,425	13.8	8,183	44.4	6.0	32,902
1974	156,120	13,549	8.7	3,819	28.2	3.7	22,103
1975	160,652	14,458	9.0	4,459	30.8	5.3	20,743
1976	182,132	23,116	12.7	1 0,736	46.4	5.3	31,280
1977	204,231	24,808	12.1	1 0,354	41.7	4.9	32,902
1978	228,058	21,626	9.5	8,345	38.6	3.9	24,298
1979	279,805	29,529	10.6	1 2,831	43.5	3.8	32,132
1980	342,280	38,780	11.3	1 8,610	48.0	4.2	38,780
1981	372,743	50,353	13.5	2 5,305	50.3	4.8	47,819
1982	321,654	31,559	9.8	1 5,083	47.8	3.3	28,203
1983	284,141	45,306	15.9	2 7,211	60.1	5.1	n.a.

Source: Central Bank of Barbados: Annual Statistical Digest

Changes in selective credit controls were more frequent and were used to reinforce those under the hire-purchase act. Although the measures were successful in restraining the growth on consumer durable imports, their impact was reduced after some time as people found alternative sources of credit (uncontrolled credit). For example, many people borrowed from credit unions and insurance companies or drew down on their savings to supplement the available credit.

Although credit controls were easily avoided, direct controls on imports was not tried. This was due to the administrative difficulties foreseen and the view that the problem was not acute. However, on few occasions quotas were introduced for short periods e.g. in 1977 and 1982 motor cars were placed on quotas. The authorities also utilised price controls and import duties to influence the level of consumer durable imports.

The impact of the above policies is best seen by the effect they had on the level of consumer durable imports and consumer instalment credit. During the period 1972-1983, outstanding consumer instalment credit moved from BDS$22.8 million to BDS$70.4 million (See Table 1), experiencing a rapid growth in the 1976-78 period. In fact between 1972-82, the personal sector was the largest single recipient of credit. This increase in credit reflects a 10% annual growth rate compared to a 12.4% rate for total loans and advances. We posit that the smaller growth rate may be attributed to the the frequent changes

of credit controls and hire-purchase regulations. This view gains support from the fact that consumer credit which grew at an annual rate of 19.6% between 1960-76 slowed to 8.5% between 1977-83 (the period of controls).

An analysis of the number and value of new agreements per year (Table 1) reveals the level of credit utilised on a year-to-year basis for the purchase of consumer durables. In many instances the value of new agreements in any one year is almost equal to the credit outstanding at year-end. This reflects the short repayment periods and the fact that new lending could only be made out of repayments, especially since most banks were already at their approved ceiling.

Cox and Worrell (1978) contend that there was a rapid increase in the propensity to import between 1961-70 due mainly to the rapid change in the economy and rising income. The trend continued into the seventies as manufacturing, tourism and Government services expanded, boosting imports of intermediate and capital goods. Imports of consumer durables did not lag far behind. The accompanying rising standard of living and the more western orientation led to increased imports of consumer durables. Cox and Worrell further suggest that the energy crisis of 1973 affected consumer durables for the period 1973-75 only, but thereafter the pre-1973 trend was resumed. They also submit that the propensity to import consumer durables seems to have risen in 1961.

Imports of consumer durables declined from $20.7 million in 1972 to $13.6 million in 1974 but grew rapidly thereafter; reaching a height of $50.4 million in 1981 (See Table 2.) The effectiveness of the credit controls is evident from the decline in the annual rate of increase of consumer durable imports which fell from 9.3% (1960-76) to 4.9% (1977-82). Imports of motor cars was responsible for most of the fluctuations during the period. For example, when total durable imports increased from $38.8 million in 1980 to $50.4 million in 1981, imports of motor cars increased by $6.7 million. On the other hand when overall durable imports declined by $18.8 million between 1981 and 1982, the value of motor cars imports fell by $10.3 million - attributable to the introduction of a quota system. However, when the quota was removed in 1983, motor car imports increased by $12.2 million (80.4%) whereas total durable imports grew by 43.6% . Over the period of 1970-83 the annual average growth rate of motor cars (8.9%) was higher than that for all durable imports durable imports (6.4%) and total imports (8.6%).

Section 11: Theoretical Model

The model is based on the idea that consumers seek to add to an existing stock of durables, depending on changes in their income levels, and that this response comes over an extended period of time. This type of model has been applied quite extensively in the empirical analysis of consumer durable expenditure in recent years (Hamburger and Zwick [1977], Wu [1965], Cuthbertson [1980] and Grieves [1983]). The expenditure on

consumer durables is the difference between the desired stock (K^*) at the end of period t and K_{t-1}, the actual stock at the beginning of the period plus replacement expenditure(R_t). Tha is:

$$C = \alpha(K^*_t - K_{t-1}) + R_t \qquad (1)$$

For the lagged stock we may substitute a distributed la on expenditure.

$$C = \Delta K + R_t \qquad (2)$$

where $R_t = sK_{t-1}$ and $\Delta K = \alpha(K^* - K_{-1})$

$$C = (1 - L)K + sLK \qquad (3)$$

where L is the lag operator

It follows therefore that:

$$K_{t-1} = [1 - (1 - s)L]^{-1}C_{t-1} \qquad (4)$$

Hence expenditure depends on the determinants of the desired stock and the lagged actual stock (which may be represented by past expenditures). The variable speed of adjustment (α) and replacement expenditure provide channels fc credit and the durable consumption-income ratio to influence durable purchase since (α) and R_t are functions of credit and the consumption-income ratio. Grieves [1983] submits that if household is subject to credit constraints, easing this would give greater liquidity and as such accelerate the speed of adjustment. In our estimation it will be difficult to separat the influence of α and R_t since identical economic factors influence both.

The household desired stock of durables (K^* can be represented as:

K^* = f(durable consumption-income ratio, income, credit, relative prices, hire-purchase terms, tastes, attitudes, advertising).

The preferred model is:

$$\ln c = B_0 + B_1 \ln(c/y)_{-1} + B_2 \Delta \ln(c/y)_{-1} + B_3 \Delta \ln y + B_4 \ln CR + B_5 HP + B_6 \ln RP + \nu_t$$

where

- c = real consumer expenditure on durables (1980=100)
- c/y = ratio of durable consumption expenditure to income
- y = real gross domestic product
- CR = loans to the personal sector deflated by price of durables
- HP = hire-purchase terms i.e $HP = d + \frac{(1 + d)}{m}$
- d = minimum deposit ratio
- m = maximum monthly repayment period
- RP = price of durables (PCD) relative to the price of nondurables (PND)

In a growing economy, we would expect that as income grows the demand for durables, and hence expenditure on durables should increase. Since purchases can be made almost immediately, there should be no long lag between income and purchases. Here we use a one period lag. Further in modelling the dynamic response of durable expenditure to changes in income we must consider the consumption to income ratio. For example in a boom (such as the

boom in video cassette recorders) the c/y ratio may increase; however in subsequent periods there will be lower replacement expenditure, a slower speed of adjustment and hence a falling rate of growth of expenditure on durables. Therefore, we expect that the ratio of durable consumption to income will have a negative effect on the next period's expenditure whereas the change in this ratio will have a positive impact.

The choice of the monetary variable to be included is controversial. The controversy surrounds the question: is it the cost of credit or the supply of credit that matters? Hamburger and Zwick [1977, 1979] suggest selective credit controls have no effect. To support their view, they suggested that individuals choose an overall liability position in planning purchases and therefore individuals will respond to selective controls by substituting uncontrolled forms of credit. Whilst there is some truth in this assertion, we posit that the individuals access to uncontrolled credit is limited and substitution is not simple, if possible at all. Further, even if substitution is possible, this would not make selective controls ineffective; it may make them less effective than they would have been if substitution were not possible. Cuthbertson [1980], Garganas [1975] and Maris [1981] all agree that consumer expenditure on durables is responsive to changes in consumer credit. Cuthbertson contends that the rate of interest will only be significant if a perfectly competitive "credit system". In a such a world the level of credit and additions to the stock of durables are chosen simultaneously. He concludes that in such a system credit and durables are complements. Taubman [1971] asserts that if consumers are rationed, borrowing is unresponsive to changes in interest rates since consumers are already constrained to borrow lower amounts than they preferred at existing rates.

In our model we opt to use credit since it is the policy that has been used and studies on the monetary sector have shown that interest rate policy is not a deterrent to borrowing in Barbados. We assume that credit is supply side determined even in the period when banks were free of Central Bank directives. Our reasoning follows that of Cuthbertson [1980, p.65]. We believe that the presence of credit permits the consumer to anticipate income and as such to smoothen his consumption over time while at the same time borrowing towards durable expenditure. That is, credit allows the individual to save after purchase instead of before.

Hire-purchase (instalment) credit is the primary source of credit for consumer durables, therefore the terms and conditions, (downpayment and amortisation period) should have a serious impact on the level of expenditure. The variable HP is used to capture this effect and represents the ability to obtain credit. Credit is tighter when the downpayment increases or the repayment period is shortened. Such policies, although having a transitory effect on expenditure, will in the short-term result in a slower speed of adjustment/replacement i.e cause a delay in purchases.

Consumer theory posits that the demand for any given good or service is a function of its own price as well as the price o other goods and services. In our model we try to capture the possibility of substitution between durables and nondurables by including their price ratio (relative prices). As the price of consumer durables increases relative to the price of all other goods and services this will lead to a reduction in durable purchases.

Since durable purchases may be postponed; advertising, attitudes and tastes will play a major role in deciding the level of purchases. However no index is available to represent these and therefore their impact on expenditure will be captured in the error-term (v_t).

<u>Description of Data and Estimation Results</u>

The model was estimated using annual data for the period 1960-1982. The resulting equation is:

1. $$\Delta \ln c = \underset{(-4.30)}{-6.341} - \underset{(-2.17)}{0.379} \ln RP - \underset{(-4.56)}{0.986} \ln(c/y)_{-1} + \underset{(2.15)}{0.425} \Delta \ln(c/y)_{-}$$

$$+ \underset{(1.91)}{1.063} \Delta \ln y + \underset{(4.12)}{0.262} \ln Cre - \underset{(-1.95)}{0.637} HP$$

$R^2 = 0.76$ SER = 0.099 D-W = 1.71 L.O.L = 22.17

where: T-statistics are in parentheses

SER = standard error of the regression

LOL = log likelihood

As the estimation results indicate, the model explains the movements of consumer durable expenditure fairly well. All the estimated coefficients have the correct sign and are significant at the 0.05 confidence level. The Durbin-Watson statistic does not indicate the presence of auto-correlation.

The results suggest that expenditure on durables is significantly and negatively related to the lagged expenditure-income ratio, relative prices and changes in the hire-purchase regulations. Hire-purchase conditions seem to have a remarkably strong impact on durable expenditure. This confirms our suggestion that a tightening of hire purchase regulations will cause consumers to delay purchases. This may reflect the need for consumers to save more in order to make the downpayment. The income elasticity is extraordinarily high; a ten percent increase in income leads to a similar increase in expenditure. This is fairly close to Cuthbertson [1980] who finds an income elasticity of 1.5.

The effects of cyclical fluctuations are as expected and very significant. A ten percent increase in the consumption-income ratio in the prior time period leads to

a similar decline in expenditure. That is, the existing consumption-income ratio has a dampening effect on expenditure. Relative price changes will cut durable consumption but the effect is not very powerful, a ten percent increase in the price of durables relative to the price of nondurables leads to a four percent decline on expenditure. The level of credit has a small but positive impact on the level of expenditure. The size of the coefficient may suggest that credit depends on desired expenditure.

Summary and Conclusion

The study attempted to examine the determinants of consumer expenditure on durables in Barbados and to judge the effectiveness of two major policy instruments - credit and hire-purchase regulations. The analysis and results suggested that monetary policy as well as fiscal policy have a strong role to play in determining expenditure on durables. An easy monetary policy, either in the form of credit availability or hire-purchase regulations, will encourage consumers to purchase durables and vice versa.

A major implication of this study is that since credit rather than interest rates influences expenditure the present policy of selective credit controls and changes in hire-purchase terms and conditions is an appropriate policy. That is, controls are effective although discriminatory. This result would also suggest that market interference is justified instead of allowing market forces to allocate resources.

From the analysis we may infer that shorter repayment periods are beneficial to banks inasmuch that the turnover rate of credit is high and when coupled with the interest rate of credit is high and when coupled with the interest rate charges on installment credit may help to push up their profitability.

The empirical analysis supported the hypothesis that the consumption-income ratio, income and prices all significantly influence the level of durable goods expenditure. It confirms that starting with any given expenditure-income ratio, an increase in the ratio would be followed by a lower growth rate of durable expenditure.

This study is a limited start towards examining consumption behaviour in Barbados. The analysis may be extended to model the impact of uncontrolled forms of credit, liquid assets in the private sector, transitory income and depreciation if and when the data becomes available. For example, we need to know if the existence of uncontrolled forms credit negates (entirely or partially) the credit restrictions. Also we need to analyse the impact of a disequilibrium in the liquid assets of the private sector on durable expenditure and depreciation rates will help us to compute the speed of adjustment.

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Appendix 1

Selective Credit Controls

March 1, 1974

Foreign borrowing by commercial banks to finance their domestic credit operations was restricted. All such borrowings must be referred to the Central Bank.

June 15, 1976

Commercial banks operating in Barbados were required to hold locally any provisions set aside to cover bad and doubtful debts. Such provisions held by head offices were to be repatriated to Barbados or set off against profits payable to head offices.

January 21, 1977

The Central Bank directed commercial banks not to expand consumer instalment credit - excluding credit for home improvement and real estate and consolidation of debt - beyond the level existing at January 21, 1977, they were also to effect a progressive reduction to 75% of the total on that date, by the end of December 1977. Banks were also advised to restrict such credit for tourist travel within the quantitative limit set.

May 19, 1977

Banks were advised not to refinance consumer debts contracted after the implementation of the Hire-Purchase and Credit-Sale Orders dated February 9, 1977 in the form of consolidation of debt.

June 30, 1977

Credit controls were placed on the distribution and personal sectors. Credit outstanding in these sectors was contained at the level obtaining on June 30, 1977. It was agreed that banks could exceed the ceiling to honour existing commitments, but not to accomodate new loans or increase in existing lines of credit. Banks were also requested to restrict their advances for foreign travel either directly to customers or under arrangements with travel agents and airlines to periods not exceeding nine months.

September 27, 1977

New and existing mortgage loans, and land purchased on mortgage terms and treated as personal loans were excluded from the limit set at June 30 if the original or extended maturities exceeded 15 years.

October 5, 1978

The Central Bank, in order to permit commercial banks some flexibility in allocating credit to the distributive and personal sectors and within the levels obtaining at June 30, 1977, agreed that banks could grant new loans or increases in existing lines of credit, provided these were completely offset by equivalent reductions in the unused credit limits of other customers in the sectors concerned.

November 1, 1978

Loans for house repairs and home improvement with maturity of five years or more were exempted from the limit for personal loans.

February 14, 1979

The limit set for the distribution sector was reviewed; a ten percent increase over the average for the three-month period November 1978 to January 1979 was permitted for the year ended December 1979.

December 24, 1979

The credit limits set for commercial banks lending to the distribution and personal sectors were reviewed. For 1980 an increase of ten percent was allowed on balances outstanding on

December 12, 1979. This increase was to take place in two stages, the first five percent by June 30, 1980 and a further five percent by December 30, 1980.

The following categories of credit were exempted:-

1. Mortgage loans with an original or extended matur exceeding 15 years.

2. Loans for house repairs and home improvement with maturity of five years or more.

Consumer instalment credit was to be maintained at a level no greater than 75% of the total outstanding on January 1977. This limitation excluded consumer instalment credit for "home improvement and real estate" and "consolidation of debts

June 1, 1980

Credit to the personal sector

Credit to the personal sector was frozen through December 31, 1980, at the limit set to June 30, 1980.

Consumer credit to be maintained at a level no greate than 75% of the total outstanding on January 21, 1977. Consum credit for "home improvement and real estate" and "consolidati of debt" is to be accomodated within the limit set for the personal sector.

December 30, 1980

The ceiling on credit to the seasonal sector to be maintained at existing levels until March 31, 1981.

September 24, 1981

The limits on credit outstanding to the personal sector at June 30, 1980 are to be reduced by ten percent over the period ending March 31, 1982.

Consumer Credit

Total credit outstanding for "consumer durables" and "consolidation of debt" is to be reduced by ten percent of total consumer credit outstanding at August 31, 1981. This reduction is to be achieved by March 31, 1982.

Hire-Purchase Controls

October 17, 1975

The Hire-Purchase, Credit-Sale and Hire-Control Act, 1975-34 came into force. This Act gave the Central Bank the power under ministerial supervision to control all credit by way of hire-purchase credit-sale and hiring agreements.

February 9, 1977

Under the Act specific guidelines were set for instalment agreement; minimum percentage downpayments and the

maximum repayment periods of items sold under hire-purchase contracts were stipulated. (See Table 1 attached).

September 28, 1977

A new order under the Act increased the minimum downpayments on instalment credit and reduced most of the repayment periods. (See Table 11 attached).

November 23, 1978

The schedule to the Hire-Purchase and Credit-Sale Agreement (Control) Order, 1977 was amended as shown in Table 111.

August 20, 1979

The schedule to the Hire-Purchase and Credit-Sale Agreement (Control) Order, 1977 was again amended as shown in Table IV.

September 11, 1981

The schedule to the Hire-Purchase and Credit-Sale Agreement (Control) Order, 1977 was again amended as shown in Table V.

March 18, 1982

The Schedule to the Hire-Purchase and Credit-Sale Agreement (Control) Order, 1977 was again amended as shown in Table Vl.

Table I

Hire-purchase, Credit-Sale and Hire-Control Act, 1975-34

Downpayment & Repayment Schedules fixed for Hire-Purchase Agreements : Feb. 9, 1977

Downpayment (% of Value)

	10%	25%	33 1/3%	40%	50%	Period
Motor Cars		Up to $13,500				36 months
			$13,501 - $16,000			24 months
					$16,001 & over	12 months
Motor Cycles			Up to $3,000			24 months
				$3,001 & over		18 months
Television Sets		Up to $600				24 months
			$601 - $1,000			18 months
					$1,001 & over	12 months
*Stereo Equipment	Up to $250					18 months
		$251 - $500				18 months
			$501 - $1,000			12 months
					$1,001 & over	6 months
Refrigerators		Up to $900				24 months
			$901 - $1,500			18 months
					$1,501 & over	12 months
Freezers (non-commercial)		Up to $1,000				24 months
			$1,001 - $1,500			18 months
					$1,501 & over	12 months
Stoves		Up to $500				24 months
			$501 - $1,000			18 months
					$1,001 & over	12 months
Washing machines		Up to $1,000				24 months
			$1,001 & over			18 months
Water Heaters (excluding Solar)		Up to $500				12 months
			$501 & over			6 months
Cameras & Jewellry					Any amount	12 months

*Stereo equipment includes amplifiers, tuners, receivers, turntables, open-reel tape recorders, cassette tape recorders, eight-track tape recorders, stereo-compacts, speakers, radiograms.

Table II

Downpayment & Repayment Schedules fixed for Hire-Purchase Agreements : Sept. 28, 1977

Downpayment (% of Value)

Item	25%	33 1/3%	40%	50%	Period
Motor Cars		up to $13,500			24 months
				$13,501-$16,000	18 months
				$16,001 & over	12 months
Motor cycles		up to $3,000			24 months
			$3,001 & over		18 months
Television Sets		up to $600			18 months
				$601 - $1,000	12 months
				$1,001 & over	6 months
Stereo Equipment	up to $250				18 months
				$251 - $500	18 months
				$501 - $1,000	12 months
				$1,001 & over	6 months
Refrigerators				up to $900	18 months
				$901 - $1,500	12 months
				$1,501 & over	6 months
Freezers (non-commercial)				up to $1,000	18 months
				$1,001 - $1,500	12 months
				$1,501 & over	6 months
Stoves	up to $500				24 months
		$501 - $1,000			18 months
				$1,001 & over	12 months
Washing Machines (incl. Dish Washers)				up to $1,000	18 months
				$1,001 & over	12 months
Water Heaters (excl. Solar)	up to $500				12 months
		$501 & over			6 months
Cameras and Jewellery				Any Amount	12 months

Table III

Downpayment & Repayment Schedules fixed for Hire-Purchase Agreements : Nov. 23, 1978

Downpayment (% of Value)

Item	20%	25%	33 1/3%	40%	50%	Period
Motor Cars			Up to $13,500			24 months
					$13,501 - $16,000	18 months
					$16,001 & over	12 months
Motor Cycles			Up to $3,000			24 months
				$3,001 & over		18 months
Television Sets			Up to $600			18 months
					$601 - $1,000	12 months
					$1,001 & over	6 months
Stereo Equipment		Up to $250				18 months
					$251 - $500	18 months
					$501 - $1,000	12 months
					$1,001 & over	6 months
Refrigerators			Up to $1,000			18 months
					$1,001 - $1,700	12 months
					$1,701 & over	6 months
Freezers (non-commercial)					Up to $1,000	18 months
					$1,001 - $1,500	12 months
					$1,501 & over	6 months
Stoves	Up to $700					24 months
			$701 - $1,000			18 months
					$1,001 & over	12 months
Washing Machines (incl. Dish Washers)					Up to $1,000	18 months
					$1,001 & over	12 months
Water Heaters (excl. Solar)			Up to $500			12 months
			$501 & over			6 months
Cameras and Jewellry					Any amount	12 months

Downpayment & Repayment Schedules fixed for Hire-Purchase Agreements : Aug. 20, 1979

Downpayment (% of Value)

Item	20%	25%	33 1/3%	40%	50%	Period
Motor Cars			Up to $20,000			12 months
					$20,000 - $30,000	18 months
					$30,001 & over	12 months
Motor Cycles		Up to $3,000				24 months
				$3,001 & over		18 months
Television Sets			Up to $600			18 months
					$601 - $1,000	12 months
					$1,001 & over	6 months
Stereo Equipment		Up to $250				18 months
					$251 - $500	18 months
					$501 - $1,000	12 months
					$1,001 & over	6 months
Refrigerators			Up to $1,000			18 months
					$1,001 - $1,700	12 months
					$1,701 & over	6 months
Freezers (non-commercial)					Up to $1,000	18 months
					$1,001 - $1,500	12 months
					$1,501 & over	6 months
Stoves	Up to $700					24 months
			$701 - $1,000			18 months
					$1,001 & over	12 months
Washing Machines (incl. Dish Washers)					Up to $1,000	18 months
					$1,001 & over	12 months
Water Heaters (excl. Solar)			Up to $500			12 months
			$501 & over			6 months
Cameras and Jewellry					Any amount	12 months

Table V

Description and price of goods	Minimum percentage payment	Maximum period of months for payment of balance
1. Motor Vehicles (2 tons and under)		
Up to and including $13,500	33 1/3 per cent	24 months
$13,501 to and including $20,000	50 per cent	18 months
$20,001 to and including $30,000	50 per cent	12 months
$30,001 and over	100 per cent	–
2. Motor Cycles		
Up to and including $3,000	33 1/3 per cent	18 months
$3,001 and over	50 per cent	12 months
3. Television Sets		
Up to and including $600	33 1/3 per cent	18 months
$601 to and including $1,000	50 per cent	12 months
$1,001 and over	50 per cent	6 months
4. Stereo Equipment* and Video Cassette Recorders	50 per cent	6 months

Description and price of goods	Minimum percentage payment	Maximum period of months for payment of balance
5. Refrigerators		
Up to and including $1,000	33 1/3 per cent	18 months
$1,001 to and including $1,700	50 per cent	12 months
$1,701 and over	50 per cent	6 months
6. Freezers (non commercial)		
Up to and including $1,000	50 per cent	18 months
$1,001 to and including $1,500	50 per cent	12 months
$1,501 and over	50 per cent	6 months
7. Stoves		
Up to and including $700	20 per cent	24 months
$701 to and including $1,000	33 1/3 per cent	18 months
$1,001 and over	50 per cent	12 months
8. Washing Machines (including dishwashers)		
Up to and including $1,000	50 per cent	18 months
$1,001 and over	50 per cent	12 months

SCHEDULE -- *Concl'd*

Description and price of goods	Minimum percentage payment	Maximum period of months for payment of balance
9. Water Heaters (excluding solar)		
Up to and including $500	33 1/3 per cent	12 months
$501 and over	33 1/3 per cent	6 months
0. Cameras and Jewellery+	50 per cent	9 months

* Stereo equipment includes amplifiers, tuners, receivers, turn tables, open-reel tape recorders, cassette tape recorders, eight track tape recorders, stereo-compacts, speakers, radiograms whether sold separately or as a unit or whether portable or not.

+ Jewellery includes watches.

Table VI

Description and price of goods	Minimum percentage payment	Maximum period of months for payment of balance
4. **Stereo Equipment***		
Locally manufactured		
up to and including $1 000	25%	18 months
$1 001 and over	50%	12 months
Imported stereo equipment * and Video Casette Recorders	50%	6 months

*Stereo equipment includes amplifiers, tuners, receivers, turn-tables, open-reel tape recorders, cassette tape recorders, eight-track tape recorders, stereo-compacts, speakers, radiograms, whether sold separately or as a unit or whether portable or not.

Data Source

Column 1: Daniel Boamah's estimates

Column 2,3: Gafar-Napier 1960-1968
Central Bank of Barbados 1969-1982

Column 4,5,6: Central Bank of Barbados ASD

Column 9: Calculated using
d = 10% m = 24 months for period 1960-1976:
Thereafter using weights according to data in Appendix 1.

Appendix 2

Consumption Expenditure Data

YEAR	C $m	PCD 1980=100	PND 1980=100	CRE $m	RY $m	HP
1960	21.0	46.7	41.9	4.2	555.6	0.1375
1961	17.2	49.2	40.1	4.4	586.6	0.1375
1962	18.3	46.9	33.9	4.9	596.2	0.1375
1963	19.0	48.2	37.1	4.5	610.9	0.1375
1964	22.0	55.4	40.5	5.2	581.6	0.1375
1965	22.8	57.0	46.9	6.3	540.8	0.1375
1966	28.2	58.9	45.6	7.2	564.7	0.1375
1967	26.8	61.1	36.5	10.0	528.4	0.1375
1968	28.8	64.0	37.9	11.8	562.9	0.1375
1969	38.1	64.6	38.6	22.2	571.2	0.1375
1970	56.1	72.6	47.6	31.5	627.2	0.1375
1971	53.5	76.1	52.7	36.2	629.8	0.1375
1972	51.7	81.3	55.3	51.9	637.5	0.1375
1973	53.2	82.9	56.0	56.8	655.7	0.1375
1974	71.5	95.8	61.3	63.4	640.4	0.1375
1975	78.4	110.7	69.7	74.4	626.9	0.1375
1976	84.0	114.4	73.9	88.2	653.9	0.1375
1977	88.7	125.0	75.4	93.4	677.9	0.3381
1978	93.4	140.6	89.0	106.9	710.5	0.3316
1979	101.8	156.0	91.9	131.9	766.7	0.3440
1980	115.0	100.0	100.0	135.0	803.8	0.3589
1981	134.7	115.2	105.3	139.3	779.9	0.3651
1982	133.9	129.4	119.9	130.9	743.2	0.3589