

# The Cash Component in the Money Supply The Experience of Sri Lanka 1950-1970\*

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## Introduction

In both, text books on monetary theory as well as in the more sophisticated literature, discussions on the money supply usually employ some version of the money multiplier model. The value of the money multiplier ( $k$ ) is normally derived<sup>1</sup> as

$$\frac{M}{L} = \frac{1}{c+r(1-c)} = k \dots\dots\dots(1)^2$$

where  $M$  = the money stock defined (in the narrow sense) to include currency and demand deposits held by the non-bank public,

$L$  = high powered money (or the monetary base) which equals cash liabilities of the central bank plus commercial bank deposits in the central bank,

$c$  =  $C/M$  where  $C$  stands for currency held by the non-bank public,

$r$  = ratio of actual cash reserves to demand deposits in the banking system.

Rewriting equation (1) the stock of money at any given moment of time can be shown to be

$$M = \frac{1}{c+r(1-c)} L = kL \dots\dots\dots(2)$$

The orthodox theory of the money supply usually assumed  $k$  to be stable, and concentrated on variations in  $L$ ; the usual assumption has been that  $L$  was under the control of the monetary authority. Therefore, by implication, the total money stock ( $M$ ) was supposed to be under the control of the monetary authority. Our concern here is not to analyse the degree of control exercised by the monetary authority over the supply of  $L$  but to discuss the long-run trend and determinants of the public's cash ratio ( $c$ ) in Sri Lanka;  $c$  being one of the parameters determining the value of the money multiplier.

\* The author wishes to acknowledge with thanks the helpful comments of Alan Roe in developing the ideas contained in this paper. However, the author alone is responsible for any errors which may remain.

1. The derivation of the equation can be found, for instance, in Johnson (1971) or Goode and Thorn (1959).
2. This is identical to the more familiar formula  $k = \frac{1+a}{a+r}$  in which  $a$ —the ratio of currency to demand deposits.

As will be seen in a moment, in Sri Lanka the variable  $c$  has shown a sharply rising trend over the period 1950-70. Therefore, it will be useful to state briefly the main monetary implications of a rising trend in  $c$ . Firstly, a rise in  $c$  implies that for any given increase in high powered money ( $L$ ) the potential ability of the banking system to create credit is diminished. Secondly, it implies that the task of the central bank in controlling an expansion in bank credit becomes relatively easier. It must be stressed that this is particularly important in the context of Sri Lanka where the Central Bank, since its inception, has had relatively little control over the supply of  $L$ ; a situation which was created by an exogenously determined balance of payments and by government fiscal operations which relied heavily on deficit financing and where a large proportion of the funds to finance the budget deficit came by way of loans from the Central Bank itself.<sup>3</sup> If the central bank is unable to control effectively the supply of  $L$  and at the same time has to confront a low value of  $c$  two consequences could be envisaged. On the one hand the banks will be able to supply credit on easier terms. On the other hand, if the central bank prevents credit expansion by devices such as a higher legally required cash ratio and/or if there is no effective demand for credit one of three things could happen. One possibility is that when banks are forced to bear the extra cost of carrying the additional cash reserves they would have to settle for lower profit margins. A second possibility is that banks might have to charge more from depositors operating current accounts and pay lower interest rates to savings and fixed deposit holders—both of which would discourage the banking habit. The third possibility is that the banks might levy higher interest rates from borrowers and make bank credit more expensive. Finally it must be borne in mind that if not for the rising value of  $c$  the government would have found its programme of deficit financing even more expansionary than what it actually was.

As Harry Johnson (1971) remarks, the "mechanistic approach" to  $k$  has been abandoned, at least in some quarters, now. Instead, economists look at the different parameters in the money multiplier as "behavioural functions of economic variables" (p. 136). Even in the case of financially mature capitalist economies such as the U.S. and the U.K., the current view is that a stable  $k$  is inapplicable. For example, Rasche (1972) comments that "the size of the random fluctuations in the reserve multiplier remains a major factor in determining the size of deviations of the money stock from target values." (p. 19). Frank Brechling (1958) was one of the first to produce some evidence to demonstrate the short-term instability of the public's "cash preference ratio" in some western capitalist economies. The analyses by Cagan (1965) for the U.S. and by Sheppard (1971) for the U.K. have demonstrated the considerable degree to which the value of  $k$  varies in both the short-term as well as the longrun.<sup>4</sup>

Whatever the definition of money may be, the general expectation is that the development of the economy within a capitalist framework accompanied by the growth of commercial banks would lead to a secular decline in  $c$ . The empirical validity of the proposition has been established, for instance, by

3. See Karunatilake (1973).

4. Admittedly,  $k$  could be stable in a different sense when the movements in the constituent ratios tend to offset each other in their impact on  $k$ . Cagan (1965) found this to be true for the U.S. for "much of the period" he reviewed. (p. 19)

Friedman and Schwartz (1963) for the U.S. and by Sheppard (1972) for the U.K. Khazzoom (1966) who reviewed the experience of thirty-six developing countries for the period 1946-62 found;

“an almost universal tendency for the  $C_2$  ratio to decline and an overall average rate of decline three times stronger than the corresponding rate for  $C_1$ ” and “a mild tendency for  $C_1$  ratio to rise in the South East Asian group taken together.” (p. 62).<sup>5</sup>

Table I shows the values of the public's cash ratio for Sri Lanka over the period 1950-70. Two ratios have been computed. In the first ( $C_1$ ) the denominator includes only demand deposits held by the public outside the commercial banking system. In the second ( $C_2$ ) the denominator includes both commercial bank demand deposits as well as savings and time deposits held by the non-bank public. In both ratios the numerator includes only cash in circulation outside the banking system and the central government. It is seen that  $C_1$  has risen very sharply; very much the reverse of the historical experience of the countries studied in some works cited above. Even  $C_2$ , which Khazzoom found to be generally declining in developing countries, does not show a secular decline in the case of Sri Lanka. The rest of this article is an attempt to explain this deviation from the general pattern; attention is focussed on the secular rise of  $C_1$  rather than on  $C_2$ .

TABLE I  
Public's demand for Cash

Year	(1)	(2)
	$C_1$	$C_2$
1950	0.363	0.284
1951	0.357	0.283
1952	0.386	0.292
1953	0.414	0.302
1954	0.388	0.279
1955	0.363	0.262
1956	0.373	0.267
1957	0.395	0.273
1958	0.455	0.304
1959	0.488	0.383
1960	0.493	0.318
1961	0.519	0.332
1962	0.519	0.340
1963	0.541	0.348
1964	0.541	0.344
1965	0.537	0.341
1966	0.518	0.322
1967	0.532	0.328
1968	0.553	0.331
1969	0.567	0.328
1970	0.575	0.330

**Notes:** In computing these ratios, averages of end of month stocks of the different variables involved have been taken. In the case of figures for 1970, only the average of the first nine months is taken since the demonetisation of the Rs. 50 and Rs. 100 notes distorted the monetary situation in the last three months.

**Source:** Central Bank of Ceylon, Annual Reports. (Hereafter referred to as CBR)

$$5. C_1 = \frac{C}{C + DD} ; C_2 = \frac{C}{C + DD + STD}$$

where  
 $C$  = cash in circulation outside the banking system,  
 $DD$  = demand deposits in commercial banks held by the private sector,  
 $STD$  = savings and time deposits in commercial banks held by the private sector.

### Monetisation

The concept of monetisation is usually used in economic literature to describe the increasing use of money in economic transactions. As such, a monetised economy is seen as the opposite of a barter economy. In this context, transactions include both intermediate as well as final (or income-creating) transactions. It must also include the act of saving. Thus, monetisation can be defined as the increasing use of money to settle transactions arising in the process of investment, production and consumption. As such, monetisation can be viewed as a concomitant of specialisation in economic activity. Thus, the cultivation of cash crops in an agricultural society, factor payments in cash, the levying of taxes in cash, development of communications and a host of other factors can be singled out as aiding the process of monetisation.

The major cause for the steady rise in  $c_1$  has to be found in the gradual monetisation of the rural economy of Sri Lanka which occurred in the period under review, although the beginning of the monetisation process goes back at least into the nineteenth century.<sup>6</sup> In Sri Lanka in the early 1950's the relatively small use of cash, as indicated by the relatively low value of  $c_1$ , must not be attributed to a highly monetised economy with a developed banking habit. On the contrary, it could be surmised, although hard statistical proof is not available to support the contention, that it was the result of a very low level of monetisation in the rural sector and a relatively widespread banking habit in the highly monetised modern sector of the economy.<sup>7 & 8</sup> In other words, the low value of  $c_1$  can be regarded as the monetary reflection of the existence of a large underdeveloped rural sector—large in terms of contribution to the national product—within a “dualistic” economic framework.

Since about the end of the World War II, two basic changes which have occurred in the economy have had a significant bearing on the process of monetisation of the rural sector. The first was the expansion, both in absolute and relative terms, of production in the rural sector. In the composition of the GNP by sector of origin the relative share of export crops declined from over 40 per cent in the early 1950s to less than 20 per cent in the late 1960s.<sup>9</sup> The share of manufacturing (which includes an unspecified but negligible amount produced in the rural sector) showed only a moderate rise from about 8 per cent<sup>10</sup> to 12 per cent over the same period. In contrast, the share of domestic agriculture showed a significant increase from about 12 per cent to about 18

6. See Roberts (1973).

7. The terms “rural sector” and “modern sector” are not easily definable, especially to have clear cut operational validity. For the purposes of this paper, the rural sector is defined to include production of food crops for domestic consumption, various cottage industries and services supplied in relation to such primary and secondary production activity. The modern sector is defined to include the production of cash crops for export, manufacturing using “modern” methods of production and services supplied in relation to such primary and secondary production activity. In operational terms, therefore, the modern sector largely consists of the export agriculture sector, some manufacturing industries and the bulk of service industries. In the rural sector the single dominant crop is taken to be paddy. Production of other goods and services are assumed to play a secondary role. The obvious overlaps in certain respects between the two sectors (e.g. small holdings of export crops) should not materially affect the rest of the arguments.

8. According to the Consumer Finance Survey 1963, 14.5 per cent of urban incomes, 19.5 per cent of rural incomes and 12.4 per cent of estate incomes were received in kind.

9. Figures from CBR. Unless otherwise stated all figures quoted in the text have been obtained from this source.

10. Snodgrass (1966), Statistical Appendix Table A.F.

per cent in the same period. The second important change which needs to be stressed is the gradual market orientation of the rural economy. This is best illustrated in respect of the cultivation of paddy, the predominant food crop in the rural sector.

The physical output of paddy increased by about 250 per cent or by 5.5 per cent (compound) per annum between 1950 and 1970. With such a growth, the marketed surplus of paddy too should have grown. Information does not exist to estimate the total marketed surplus of paddy in the country. However, as Table II shows, the government, which operated a guaranteed price scheme (GPS) for paddy, procured a substantial proportion of the total estimated output. It is seen that the share procured by the government has risen quite

TABLE II

## Paddy output and government purchases

Year	(1) Total paddy output (million bushels)	(2) Quantity purchased by the government under the Guaranteed Price Scheme (million bushels)	(3) (2) as a percentage of (1)
1950	22.0	0.4	1.8
1951	22.0	0.5	2.3
1952	28.9	1.3	4.5
1953	21.9	0.3	1.4
1954	31.1	3.6	11.6
1955	35.7	13.4	37.5
1956	27.5	8.7	31.6
1957	31.3	13.3	42.5
1958	36.6	13.2	36.1
1959	36.4	16.2	44.5
1960	41.0	20.8	50.7
1961	43.1	22.4	51.9
1962	48.1	27.0	56.1
1963	49.1	27.7	56.4
1964	50.5	29.7	58.8
1965	36.3	21.4	58.9
1966	45.8	28.0	61.1
1967	55.0	13.4	24.4
1968	64.6	14.9	23.4
1969	65.9	13.9	21.1
1970	76.8	26.2	34.1

Sources: 1950-69, *Draft Agricultural Development Plan*. 1971-77, The Ministry of Agriculture, Sri Lanka. 1970, CBR 1970.

sharply after 1954. By the early 1960s, the government succeeded in procuring over half the total output. It is difficult to produce evidence to substantiate fully the argument that the rising marketed surplus has been the only factor responsible for the increased share of government procurements. In fact, improvements in the administrative procedures to procure paddy from the producers would have been another factor which helped to raise the share of the government. Perhaps, an increase in the price offered by the government relative to the price in the open market could have been an even more important factor. Available evidence, however, discounts such a possibility. The ratio of price per bushel of paddy under the GPS to that in the open market remained virtually constant from 1954 to 1961 after which a very marginal decline is observed upto 1967 and thence a sharp decline.<sup>11</sup>

11. The argument is based on price data published in the *Statistical Abstract of Ceylon* (Annual).

The growth in economic activity in the rural sector was, however, not confined to paddy production. Especially since the second half of the 1960's there has been a heavy emphasis on the cultivation of food crops other than rice to provide local substitutes for imports.<sup>12</sup>

Higher money incomes in the rural sector would have stimulated the demand for transactions and precautionary money balances. Due to a number of reasons, these balances appear to have been held largely in the form of currency. Firstly, given the relatively low per capita income in the rural sector,<sup>13</sup> the average value of transactions should have been low; a factor which would have discouraged the growth of bank accounts. Against this argument, however is the fact that the distribution of income in the rural sector is quite unequal.<sup>14</sup> However, the higher income groups in the rural sector could have been discouraged by, among other things, the cost of holding demand deposits. Furthermore, to the less sophisticated villager, maintaining a demand deposit could have been too complicated a task. Moreover, the general non-acceptance of cheques in settlement of transactions would have been another discouraging factor. Finally, the rapid growth of savings deposits<sup>15</sup> suggests that for many people the real alternative might have been between holding currency and maintaining savings deposits. These arguments are suggestive rather than compelling but are probably reasonably correct.

The lack of convenient access to a bank office could have been an important factor which led to the rise in  $c_1$ . The growth rates of paddy output per capita in a sample of districts from the "Dry" and "Wet" zones of the island shown in Table III clearly suggest that the marketed surplus was generated principally in the Dry Zone.

TABLE III

Per capita output of paddy—Compound growth rate per annum  
(1953-68)

Dry Zone		Wet Zone	
Anuradhapura	.. 5.0	Kegalle	.. 0.8
Polonnaruwa	.. 2.0	Matara	.. -0.3
Batticaloa	.. 3.2	Ratnapura	.. 0.2

Source: Computed from figures published in the *Statistical Abstract of Ceylon* (Annual). (The author wishes to acknowledge the assistance of Piyasiri Wickramasekera in computing these figures).

Computations shown in Table IV demonstrate that the Dry Zone has had a higher density ratio of bank offices since about 1965. However, the accessibility ratio has always been lower in the Dry zone than in the Wet Zone. Even as late as 1970, a dweller in the latter area enjoyed five times as much easier

12. The best early example is potatoes. In 1967, the government imposed a total ban on the import of potatoes which in the previous three years cost on the average Rs. 22 million per year. In response to the incentives created for domestic production, output exceeded the 1 million cwt. mark (roughly the quantity imported in 1965) in 1972-63.
13. According to the *Survey of Ceylon's Consumer Finances* 1963, in the "rural" sector the average income for two months per income receiver was only Rs. 254.01 or 49.8 per cent of the average urban income. In 1969-70, according to Socio-Economic Survey 1969-70, comparable figures have risen marginally to Rs. 280.00 and 54.5 per cent for a two month period.
14. See publications cited in foot note 13 above.
15. The sum of savings deposits (nominal value) with the Post Office Savings Bank, Ceylon Savings Bank and Commercial Banks which was Rs 216 million in 1949 more than doubled to Rs 547 million by 1960 and again more than doubled to Rs. 1242 million by 1970 (CBR 1973).

TABLE IV

## Regional distribution of bank offices

Year	Density ratio		Accessibility ratio		
	Dry Zone	Wet Zone	Dry Zone	Wet Zone	Wet Zone*
1960	0.034	0.646	2,434.2	290.0	619.0
1965	0.095	0.082	695.4	147.0	254.0
1970	0.145	0.126	384.3	85.8	145.0

Notes: Density ratio =  $\frac{\text{number of bank offices} \times 10,000}{\text{population}}$

Accessibility ratio =  $\frac{\text{land area}}{\text{number of bank offices}}$

\* The number of bank offices in the city of Colombo has been subtracted from the Wet Zone total.

Sources: Figures on bank offices from CBRs; data on population and land area from the *Statistical Abstract of Ceylon* (Annual).

access to a bank office than a dweller in the Dry Zone. Thus, farmers in the Dry Zone who appear to have accounted for a higher proportion of the marketed surplus in paddy, would have found bank services relatively inaccessible even if they desired to operate bank accounts.

### Bank Debits Tax

In trying to explain the secular relative rise in cash balances, some commentators have attributed a major role to a tax imposed on bank debits in current accounts. The tax, called the Bank Debits Tax (BDT), which was in operation from 1957 to 1965 (and reintroduced with effect from October 1970) imposed a tax of one tenth of one per cent of the value of all debits in current accounts. For instance, Rajalingam and Fernando (1971) (hereafter referred to as RF for brevity), referring to the period 1952-70, have argued that their

“analysis covering the entire period serves to show unmistakably that the growth of currency was substantial and rapid only in the years in which the Bank Debits Tax was in force. In these years too, the rate of growth and turnover of demand deposits have been considerably lower than the years in which the tax was not in force. The conclusion is that currency rose mainly in response to a gap created by the relatively lower utilisation of demand deposits brought about by the operation of the Debits tax.” (p. 50)

Undeniably, the BDT must have encouraged the substitution of cash for deposit money in transactions. However, its importance in explaining the rise in  $c_1$  must not be overstressed. In point of fact, some of the arguments adduced by RF in support of their position are of doubtful validity.

Firstly, as shown by RF, it is a fact that between 1956 and 1960 demand deposits held by the public declined by 11 per cent and currency held by the public increased by 47 per cent. However, this does not necessarily suggest, as RF have argued, that there was a substitution effect caused by the BDT. Two arguments can be adduced against their viewpoint. Firstly 1957 to 1960 was a relatively lean period for export earnings. The annual average value (f.o.b.) of exports declined from Rs 1828 million in 1954-56 to Rs. 1745 million in 1957-60. As Graph I demonstrates, the post-Korean slump earlier in the decade was also associated with a similar decline in the amount of demand deposits held by the public. Secondly, between the fiscal years (October to

September) 1952/53-1955/56 and 1956/57-1959/60 government expenditure recorded a sharp increase from a fiscal year average of Rs 1144 million to Rs 1788 million an increase of about 56 per cent. During the first period, the budget deficit averaged a mere Rs. 12 million whereas in the second it reached a staggering Rs 404 million. Of this amount, approximately 37 per cent was financed with loans from the banking system. This pattern of fiscal operations should have led to an increase in money balances in the hands of the public. However, the division of such increased balances between cash and demand deposits would depend, among other things, on the distribution of the new income generated by government expenditure. A distribution favouring the lower income groups would encourage the use of cash rather than demand deposits. Among the functional categories of government expenditure, expenditure on social welfare could be considered to have an impact on income distribution in favour of the lower income groups. When a functional classification of government expenditure is made, a considerable increase in welfare expenditure<sup>16</sup> is evident over the period 1953/54-1959/60. Between 1953/54 and 1955/56 welfare expenditure accounted for about 9 per cent (Rs. 101 million) of total expenditure each year. In contrast, between 1956/57 and 1959/60 the proportion was about 13 per cent (Rs 206 million) each year. Thus, the decline in demand deposits and the increase in currency balances could have been partly due to two unrelated factors which operated concurrently.

Secondly, RF have cited the decline in the average monthly rate of turnover of demand deposits from 1.95 in 1953/56 to 1.79 in 1957-60 as further proof of the negative impact of the BDT on the growth of demand deposits. Graph II demonstrates that, compared to a declining trend from 1953 to 1956, the rate actually increased between 1956 and 1960. A further fall in the monthly average turnover rate to 1.72 in 1960-64 is also quoted as additional proof of the negative impact of the BDT. In 1962, however, the rate increased before reversing itself to a declining trend which continued up to 1967, two years after the BDT was withdrawn.

Thirdly, RF attribute the sharp decline in total debits in 1958 to the BDT. This argument overlooks the fact that the strike of commercial bank employees in December 1958 would have swelled transactions in cash relative to transactions in cheques. It is worth noting that in December 1959, total debits to demand deposits were Rs. 1124 million compared to Rs. 926 million in 1958.

Fourthly, a factor ignored by RF; total debits to demand deposits show a very clear rising trend since 1958 (see Graph II).

In sum, our contention is that although the BDT must have had some positive impact on the rising value of  $c_1$ , the available evidence does not seem to bear out the view that it was a "major" factor.<sup>17</sup>

16. Welfare expenditure is defined here to include all expenditure on housing, consumer food subsidy (net), pensions, relief payments to households and special welfare payments.

17. While warning the reader not to attach too much importance to the results, we produce, for what it is worth, the results of a linear regression equation where  $c_1$  was regressed on BDT (dummy variable) assuming that the latter was the only factor to cause the rise in the former.

$$c_1 = 0.445 + 0.067 \text{ BDT} \quad \bar{R}^2 = 0.095$$

(22.22)            (2.056)

Durbin Watson = 0.09

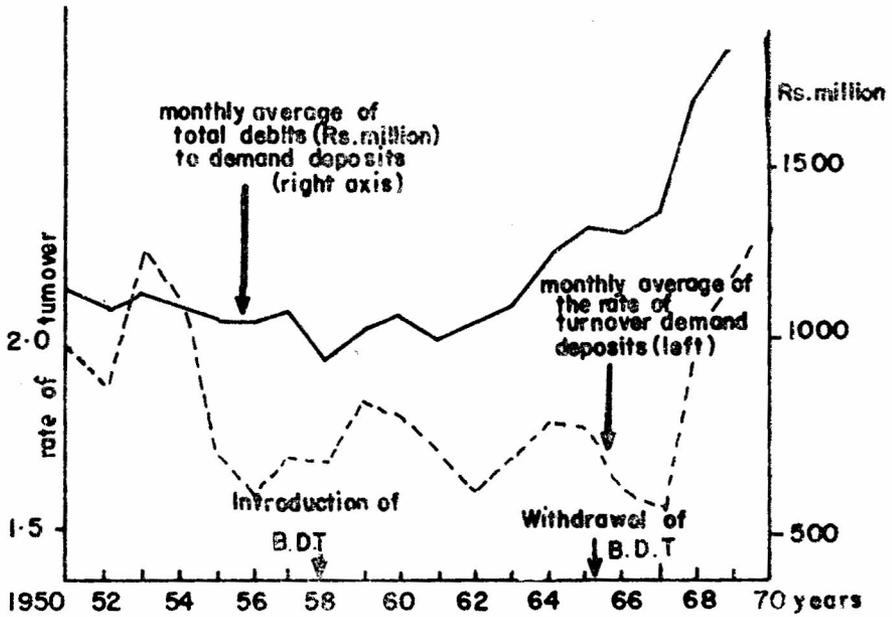
t values are shown in parentheses.

Period covered; 1950-70.

The very poor fit and the value of the Durbin Watson statistic suggesting serial correlation in the residuals must be noted.

GRAPH - I

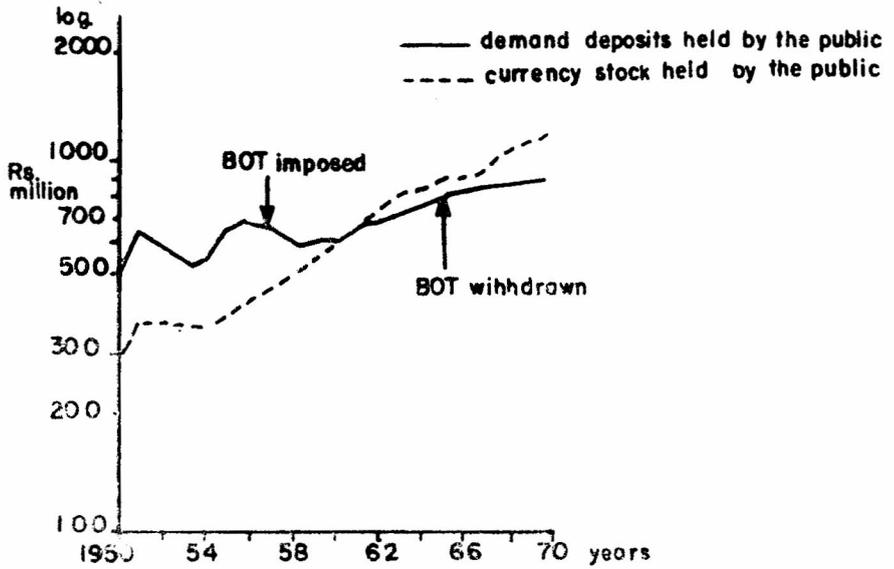
DEMAND DEPOSITS: DEBITS AND TURNOVER



Source. C.B.R.

GRAPH-II

## BANK DEBITS TAX



Source. C.B.R.

### Income Distribution

The figures in Table V suggest a significant change in the distribution of income in favour of the lower income groups over the period reviewed. Besides, it has been reported that between 1963 and 1969-70 the share of total income

TABLE V  
Income distribution by spending units

	1953		1963		1969-70	
	A	B	A	B	A	B
Highest 10th	40.6	40.6	36.8	36.8	22.6	22.6
Second ..	13.2	53.8	15.5	52.3	15.7	38.3
Third ..	10.1	63.9	11.2	63.5	11.8	50.1
Fourth ..	8.3	72.2	9.0	72.5	11.0	61.1
Fifth ..	6.9	79.1	7.5	80.0	9.4	70.5
Sixth ..	6.4	85.5	6.3	86.5	8.0	78.5
Seventh ..	5.2	90.7	5.2	91.5	6.7	85.2
Eighth ..	4.1	94.8	4.0	95.5	6.0	91.2
Ninth ..	3.3	98.1	3.0	98.5	5.1	96.3
Lowest ..	1.9	100.0	1.5	100.0	3.7	100.0

Note: A = percentage of total income received by the decile concerned.  
B = cumulative percentage.

Sources: 1953 and 1963 from *Survey of Ceylon's Consumer Finances 1963*.  
1969-70 from *Socio Economic Survey 1969-70*.

going to the rural sector has increased from 71.8 per cent to 74.8 per cent.<sup>18</sup> The importance of this evidence, however, must not be overemphasised firstly because the shift is not very significant, and secondly because the sample may not be free of errors of measurement. Nevertheless, in so far as income distribution has shifted in favour of rural areas, it is relevant for explaining the upward movement in  $c_1$ . On the one hand rural areas are less endowed with banking facilities. On the other hand both the 1953 and 1963 Surveys of Ceylon's Consumer Finances as well as the Socio-Economic Survey of Ceylon 1969-70 show that distribution of income in rural areas is more equitable than in urban areas; a factor which must favour greater use of cash in money balances.

### Direct Taxes

Several writers have put forward the hypothesis that the imposition of high rates of direct taxes (usually personal taxes) could encourage the use of cash in transactions in order to eliminate records of transactions which can be used by the tax authorities to assess income tax liabilities.<sup>19</sup> However, only Magesich (1962) has suggested (with reference to Canada) that this factor has been of any empirical significance in influencing the use of cash in money balances. Khazzoom (1966) argues that

“the effect of the tax mechanism may not be generally consequential since personal income tax plays a minor role in the tax structure of most underdeveloped countries.” (p. 13)

18. Rasaputram (1972).

19. Cf. Cagan (1958) and Macdonald (1956).

Data in Tables VI and VII clearly indicate the considerable increases in direct tax rates in Sri Lanka over the two decades. In recent times a greater administrative effort has also been made to collect direct taxes from those who should pay.<sup>20</sup> If the postulated hypothesis is true, both these factors should have encouraged the use of currency. However, against this, we must note the fact that the personal tax base in Sri Lanka is not very broad. According to

TABLE VI  
Personal income tax rates  
(for a married man with wife and two children)

Annual earned income (Rupees)	(1) 1953-54 Tax		(2) 1966-67 Tax		(3) Increase in tax between the two years	
	Rupees	As a % of Income	Rupees	As a % of Income	Rupees	%
4,500						
6,000	60	1.4	150	2.5	90	150.0
10,000	200	2.0	675	6.8	405	202.5
24,000	2,300	9.6	4,600	19.2	2,300	100.0
50,000	11,200	22.4	18,875	37.8	7,665	65.5
75,000	25,000	33.6	38,650	51.5	13,450	53.4
150,000	83,000	55.3	98,650	65.8	15,650	18.9
250,000	168,000	67.3	178,650	71.5	10,450	6.2

Sources: Column (1) from *Taxation Commission Report 5P XVIII of 1955*.  
Column (2) calculated from tax rates shown in *Taxation Commission Report 1968*.

TABLE VII  
Corporate income/profit tax rates (percentage)

Year	Tax rate	Year	Tax rate
1947	25.0	1959	45.0
1951	30.0	1961†	45.0
1953	34.0	1962*	57.0
1956	39.0	1965	50.0

Notes: From 1948 to 1959, in addition to the tax indicated in the Table, corporations were required to pay a profit tax of 20 per cent on all profits exceeding 6 per cent of the capital of the corporation or Rs. 50,000, whichever was greater. In 1959 a dividend tax of 33½ per cent on all distributed dividends was enforced. However, the tax is credited against the personal income tax liability of the recipient of the dividend income.

† In addition to the normal tax a surcharge of 15 per cent on company income was introduced.

\* The surcharge introduced in 1961 was withdrawn. Non-resident companies were required to pay 6 per cent more than resident companies as income tax in lieu of the death duty on assets in Sri Lanka belonging to non-residents. Moreover, from 1965, non-resident companies were also required to pay another 5 per cent of its taxable wealth attributable to the income derived from immovable property in Sri Lanka.

Source: *Administrative Reports (Annual)*, the Commissioner of Inland Revenue and CBR 1965.

the Survey of Ceylon's Consumer Finances 1963, of the total number of spending units in the sample, the proportions liable to pay direct taxes were as follows:—

Urban sector	—	23.2 per cent,	Rural sector	—	6.4 per cent.
Estate sector	—	2.9 per cent.			

20. See, for example, *Commissioner of Inland Revenue-Annual Report 1963-64*, p. B 40.

*A priori*, a group particularly predisposed to tax evasion could have been private traders. In a regime of important controls (particularly since 1960) they would have found ample opportunity to earn high profits and at times such profits would have been earned illegally by contravening price control regulations. From 1964 to 1967 the absolute value of demand deposits of "trading establishments" remained almost unchanged and then declined between 1967 and 1969. Only in 1970 did the level recover to that which existed in 1964. The Central Bank cites the decline from 1967 to 1968 as possible evidence of currency hoarding by traders.<sup>21</sup> However, the force of this argument is reduced when it is noticed that time deposits of trading establishments grew consistently over 1964-70.

The Central Bank has also suggested that

"the considerable increase in currency notes of large denominations which occurred since 1960 lends support to the view" (CBR 1964, p. 80)

that tax evasion could have been a factor influencing the increased relative preference for currency in transactions. The statistical evidence on this point is quite ambiguous rather than clear cut as the Bank seems to suggest. As Table VIII indicates, notes of the Rs 100 denomination rose proportionately in 1965-70.

TABLE VIII

Stock of Currency denominated in Rs. 50 and 100 notes  
(Annual average in Rs. million)

Period	(1) Total Currency	(2) Rs. 50	(3) Rs. 100	(4) (2) as a % of (1)	(5) (3) as a % of (2)	(6) Sum of (4) & (5)
1950-54	1916	310	536	16.2	28.0	44.2
1955-59	2542	597	680	23.5	26.8	50.3
1960-64	4030	1008	1040	25.0	25.8	50.8
1965-70	6554	1898	2079	29.0	31.7	60.7

Source: CBR 1968 and 1970

Notes on the Rs 50 denomination rose proportionately in the 1950s but this could be due to the process of monetisation described earlier. The sharpest increases in tax rates were recorded (see Table VI and VII) between 1956 and 1965; a period when the sum of notes in the Rs. 50 and Rs. 100 denominations as a proportion of the total value of currency issued remained almost unchanged. Thus, it is impossible to provide an unequivocal answer without a great deal more information. However, the recorded relative increase in the use of notes in the Rs 50 and Rs 100 denominations in the 1965-70 period may be interpreted as reflecting either increased business activity or attempts to evade taxes or both. Besides, it must be remembered that after about 1966 the rate of inflation in Sri Lanka rose sharply,<sup>22</sup> a factor which would have necessitated the use of currency notes of the higher denominations.

21. CBR 1968, p. 132.

22. The implicit GNP deflator (1959=100) which stood at 100.6 in 1967 rose relatively sharply as follows in the next three years: 1968-110.9, 1969-115.3, 1970-119.3.

Finally, a parenthetic point of minor importance must be mentioned to complete the analysis. The prohibition imposed on the Ceylonese to open new accounts with foreign banks operating in Sri Lanka could have retarded the growth of demand deposits in two ways. Firstly, if potential depositors had less confidence in Sri Lankian banks it would have had an adverse effect. However, no evidence exists on this possibility. Secondly, in 1961, the year in which this regulation was enacted, it effectively closed to potential new depositors seventeen out of fifty-four bank offices in the country. However, the adverse effect of this factor would have progressively diminished as the two Sri Lankian banks opened more branches. In 1968, when the regulation was repealed, only sixteen of the hundred and forty-one then existing bank offices were foreign-owned. Besides, even in 1961, bank offices of foreign-owned banks were located almost entirely in areas which were also served by the Sri Lankian banks.<sup>23</sup>

### Summary and Conclusions

Theoretical expectations postulate that economic development within a basically capitalist framework together with the growth of the banking system would lead to a decline in the public's cash ratio ( $c_1$ ). In Sri Lanka, however, in the 1950-70 period, the precisely opposite trend has been observed. The explanations for this apparent historical aberration are to be found partly in factors which might be common to the development experience of other developing countries as well and partly in factors peculiar to Sri Lanka. The Bank Debits Tax is a good example of the latter. However, the relatively more important factor is the nature, emphasis and the stage of Sri Lanka's economic development. The nature of development had a definite rural/agricultural bias. The emphasis was on development with a more equitable distribution of income. The state of development was such that indices such as per capita income (which is yet comparatively low), share of agriculture in total output (which is relatively high); all showed a comparatively low stage of development. Thus underdeveloped countries with development patterns roughly similar to that of Sri Lanka may well experience a similar increase in the use of currency relative to demand deposits and the monetary consequences of such a trend.

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23. See Silva (1965) for details on the geographical location of bank offices in the early 1960s.

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