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THE ROLE OF THE FINANCIAL SECTOR IN THE MOBILISATION AND ALLOCATION OF SAVINGS IN CARICOM

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Abstract

In this paper the effectiveness of the finacial sector in mobilizing and allocating savings is evaluated by considering the following factors. How did the changes in financial savings relate to changes in GDP? What was the relative impact of income and interest rates on the amount of savings mobilized by the sector? To what extent, did the sector direct funds more towards supporting consumption than investment? A series of tests were employed to evaluate each of these issues, in Barbados, Jamaica and Trinidad and Tobago. It was found that in Barbados and Jamaica, the growth in savings exceeded that of GDP. Interest rates had no impact on the accumulation of financial savings in Barbados and Trinidad and Tobago. There was evidence of a moderate increase in the share of private lending directed to consumption.

Introduction

The economies of the larger CARICOM countries have not performed very well in recent decades. Jamaica experienced an annual average rate of growth of GDP of 2 percent from 1980 to 1994. The average annual rate of growth for Barbados for the same period was 0.3 percent. In Trinidad and Tobago, GDP declined at an annual average rate of 1.4 percent. In the case of that country, the economic decline reflected the decline in the global petroleum market, given that the petroleum sector accounts for the largest share of GDP in that country.

It is generally accepted that the financial sector plays a key role in the mobilization of savings in an economy and the level of savings is a critical determinant of investment and economic growth. It is in this context, that the question can be raised as to the extent to which the poor performance of these economies, might be linked to the failure of the financial sector to mobilize an adequate level of savings. However, there is no consensus as to nature of the relationship between economic growth and savings. Although most cross - country empirical studies that include growth in real income as a determinant of saving, report a strong positive effect of income growth on saving, it has been argued that these results are skewed by the inclusion of the saving and growth performance of the newly industrialized economies of East Asia (Schmitt - Hebbel, Serven and Furthermore, the difference in the growth rates of such high Solimano, 1996). performing countries as those in East Asia and those of the CARICOM economies listed above seems far out of proportion to the difference in rates of savings. Domestic savings ratios, which averaged in excess of 30 percent, on an annual basis, in those countries, was, approximately, twice that of the CARICOM countries, yet their rates of growth were more than three times that of Jamaica, the country with the highest average annual growth performance during the period. This clearly indicates, that apart from the quantity of savings, the way in which savings are allocated, is also of vital importance. Nevertheless, since there can be no growth without investment and investment requires the mobilization of savings, the ability of a country to mobilize savings will clearly have an impact on its growth rate.

In this paper, the performance of the financial sector in the three large CARICOM economies, Barbados, Jamaica and Trinidad and Tobago, will be examined with a view to establishing the following factors. How effectively did the sector perform over the post 1980 period in mobilizing financial savings? To what extent did changes in interest rates and income levels have an impact on the accumulation of financial savings in the sector? How did the sector perform its role as an intermediary in channelling funds from savers to borrowers?

The Growth in Financial Savings

The financial sector in CARICOM countries consists of deposit taking institutions, such as commercial banks, finance and trust companies, insurance companies, merchant banks and building societies. In addition, there is a small stock market in each of the countries. Table 1, provides a summary of the value of assets held by the various institutions in the sector and the value of trading on the stock markets, in the respective countries. There was, clearly, significant growth in the sector in each of the countries. The commercial banks were, by far, the dominant institutions in the sector. However, other institutions, such as, finance companies in Barbados and Trinidad and Tobago, merchant banks in Jamaica and Trinidad and Tobago and building societies in Jamaica, experienced significant growth in assets.

In this section, we explore the extent to which the sector was successful in mobilizing the financial savings of private individuals and business firms. We will use as a measure of financial savings the value of time and savings deposits held in institutions, such as commercial banks, merchant banks, credit unions and building As the data in Table 1 revealed, those institutions controlled the major societies. share of assets in the sector and would provide the principal means for the accumulation of financial assets by residents of the respective countries. question arises, as to what would be an appropriate benchmark for measuring the degree of success realized by these institutions in mobilizing financial savings. It has been well established that income is a major determinant of savings and given the findings of a stable relationship between income and savings in the long run, one would expect financial savings to grow at a rate comparable to changes in national Accordingly, the success of the deposit taking institutions in mobilizing savings will be based on a comparison of the increase in the value of deposits held in these institutions, relative to that of GDP, from 1980 to 1994.

A summary of annual average growth rates of deposits held in deposit taking institutions in Barbados, Jamaica and Trinidad and Tobago, is set out in Table 2, along with GDP growth rates. Growth rates are reported in both current and constant dollar values.

In both Barbados and Jamaica, the annual average growth in deposits exceeded by a substantial margin the GDP growth rates. In the case of Barbados, there were increases in deposits in real terms during periods of negative real growth rates, between 1980 and 1985, and 1990 and 1994. In so far as Trinidad and Tobago was concerned, the growth rate in deposits exceeded that of GDP in current value

terms. However, in real terms, the decline in the value of deposits exceeded that of GDP. The only exception, was in the sub period 1980 to 1985, when there was an increase in the value of deposits in real terms, in spite of the decline in real income.

Table 1
Asset Holdings of Financial Institutions & Value of Stock Market Trades
\$ Mn

	1980	1994	
Barbados			
Commercial Banks	883.8	2650.1	
Trust & Mortgage			
Finance Companies	78.2	435.8	
Finance Companies		57.9	
Insurance Companies	146.1	680.5*	
Stock Market Trades		11.5	
Credit Unions	4.3	186.8	
Jamaica			
Commercial Banks	2,100.4	65,616.3	
Finance Houses &	-,~~~		
Trust Companies	132.5	745.9	•
Merchant Banks	84.2	14,836.8	
Building Societies	311.0	24,739.6	
Credit Unions	180.2	2,708.4	
Insurance Companies	1,354.91	9,251.4*	
Stock Market Trades	9.81	5,155.5	
Trinidad & Tobago			
Commercial Banks	5,215.9	18,205.0	
Finance Companies &	-,	~~ , ~~~ .	
Merchant Banks	485.3	2,112.1	
Trust & Mortgage		·	
Finance Companies	654.7	3081.3	
Thrift Institutions	60.2	77.9	
Insurance Companies	806.1	3,738.4*	
Stock Market Trades	87.6	295.7	

^{*} As of December 1993.

Source: Central Bank of Barbados, <u>Annual Statistical Digest 1995</u>; Bank of Jamaica, <u>Statistical Digest</u>, <u>Monthly</u>; Central Bank of Trinidad and Tobago, <u>Quarterly Statistical Digest</u>.

In summary, it would appear that these institutions were successful in mobilizing financial savings in Barbados and Jamaica. In the case of Trinidad and

¹ Values for 1983.

Tobago, the very sharp decline in real income during the decade of the eighties, undoubtedly had a strong negative impact on financial savings. The fact that the rate of decline in private financial savings in real terms between 1985 and 1990 was more than four times that of the decline in real income might be indicative of a perception that the decline in income was transitory and hence savings were used to support consumption.

Table 2
Annual Average Growth Rates in Deposits and GDP

****	Deposits			GDP
C	urrent	Constant¹	Curren	t Constant
Barbados				
1980 - 1994	9.9	4.7	5.1	0.3
1980 - 1985	11.3	3.4	6.8	-0.4
1985 - 1990	13.8	9.7	7.4	2.2
1990 - 1994	3.5	0.2	0.3	-1.3
Jamaica				
1980 - 1994	31.6	7.2	26.6	2.1
1980 - 1985	26.7	8.7	18.6	2.0
1985 - 1990	24.1	9.7	22.2	4.9
1990 - 1994	48.4	2.4	43.7	1.0
Trinidad & To	bago			
1980 - 1994	7.5	-2.3	4.8	-1.4
1980 - 1985	16.7	3.8	3.8	-2.4
1985 - 1990	0.2	-9.4	3.6	-2.3
1990 - 1994	6.0	-1.4	7.4	1.0

Constant values were estimated by deflating current values by the consumer price index of the respective countries.

One important criterion of the extent to which the financial sector will be successful in mobilizing savings, will be the range of financial assets offered by the sector to savers. In the case of these countries the dominant institutions offer a limited range of assets in the form of time and savings deposits. The relatively underdeveloped state of securities markets in all of the countries offered limited scope for meaningful portfolio diversification. In Table 3, information is provided on the number of companies issuing securities and the value of the amounts issued over the period from 1983 to 1994. In Jamaica, there were no new issues over a three year period from 1989 to 1991. In Trinidad and Tobago, there were no new issues in 1985 and 1986 and a single issue in each year over the years from 1987 to 1992. The cumulative value of the amounts raised over the period, was, approximately 9 percent and 4 percent of the value of private holding of time and savings deposit in Jamaica and Trinidad and Tobago, respectively.

Table 3
Capital Market Activity: Jamaica & Trinidad and Tobago
New Issues of Securities. (\$ Millions)

-		Jamaica	Trinidad and	Tobago
	No. Issues	Value	No. Issues	Value
1983	4	3.1	4	21.0
1884	7	17.9	2	7.4
1985	9	58,3	0	0.0
1986	7	117.2	0	0.0
1987	4	119.0	1	26.2
1988	2	971.2	1	3.4
1989	0	0.0	1	12.0
1990	0	0.0	1	21.0
1991	0	0.0	1	7.5
1992	. 4	879.6	1	31.2
1993	4	2,916.5	3	11.5
1994	2	1,008.1	7	226.0
Total	43	6,090.9	22	346.2
Value of depos	its; 1994	66,659.0		9370.5

Source: Bank of Jamaica, <u>Statistical Digest</u>, various issues and Central Bank of Trinidad and Tobago, <u>Quarterly Statistical Digest</u>.

The Impact of Interest Rates and Income on Financial Savings

As indicated in the previous section, time and savings deposits accounted for the major portion of financial savings in these countries. In each of the countries, the largest share of such deposits was kept in the commercial banking system. The interest rate paid on time deposits was higher than that paid on savings deposits. Nevertheless, as indicated in Table 4, savings deposits accounted in most years for more than 80 percent of financial savings held by private individuals in the banking system in both Barbados and Jamaica. There was, however, a greater variability in the share held in savings deposits in Jamaica, where as indicated in the table, it ranged from a low of 64 percent to a high of 88 percent. In Trinidad and Tobago individuals held, approximately, the same share of their financial savings in time and savings deposits. On the other hand, in each of the countries, by far the largest portion of financial savings held by firms in the banking system were in time deposits.

Since savers are free to choose between the two types of deposits in accumulating financial savings, what might account for the fact that savers in both Barbados and Jamaica held the major share of their savings in savings deposits which pay lower interest rates? This may be a reflection on the fact that it is the ability to save, which is the primary determinant of savings. It may also be the case, that the differential in interest paid on the two types of deposits has not been sufficiently large to induce holders of savings deposits to shift their savings into time deposits. Furthermore, there appears to be differences in the institutional structure of the

banking system in Trinidad and Tobago as compared with that of the other countries, in the sense that a wider array of deposits are offered at differential interest rates. This might have contributed to a higher level of sensitivity on the part of savers in that country to interest rates.

Table 4
Deposits: Percent of Total Deposits'

	Barbados		Jamaica	Jamaica		ago
	Savings	Time	Savings	Time	Savings	Time
1980	85.0	15.0	0.88	12.0	57.0	43.0
1981	85.0	15.0	80.0	20.0	55.0	45.0
1982	82.0	18.0	77.0	23.0	55.0	45.0
1983	82.0	18.0	68.0	32.0	52.0	48.0
1884	82.0	18.0	64.0	36.0	48.0	52.0
1985	82.0	18.0	73.0	27.0	47.0	53.0
1986	86.0	14.0	78.0	22.0	50.0	50.0
1987	86.0	14.0	83.0	17.0	50.0	50.0
1988	87.0	13.0	80.0	20.0	46.0	54.0
1989	86.0	14.0	81.0	19.0	49.0	51.0
1990	85.0	15.0	0.08	20.0	52.0	48.0
1991	83.0	17.0	86.0	14.0	57.0	43.0
1992	81.0	19.0	86.0	14.0	56.0	44.0
1993	87.0	13.0	84.0	16.0	59.0	41.0
1994	90.0	10.0	76.0	24.0	60.0	40.0

^{&#}x27;Savings plus time deposits held by individuals in the commercial banking system.

The impact of changes in interest rates and income on savings deposits held by individuals in the banking system was analyzed by estimating the following equation in first difference form.

$$S_d = \alpha_0 + \alpha_1 I_s + \alpha_2 Y \tag{1}$$

where S_d , represents the value of savings deposits held by individuals, I_{s} , the interest rate on savings deposits and Y real GDP. In addition, given the relatively high share of financial savings held in time deposits in Trinidad and Tobago and the variability in holdings of such deposits in Jamaica, equations (2) and (3) were estimated to assess the impact of the interest differential in addition to income on holdings of deposits.

$$S_d = \beta_0 + \beta_1 I_d + \beta_2 Y \tag{2}$$

$$T_{d} = \mu_{o} + \mu_{1}I_{d} + \mu_{2}Y \tag{3}$$

where T_d , represents the change in the value of time deposits held by individuals and I_d the difference between interest rates paid on time and savings deposits. The equations were estimated by Ordinary Least Squares and the results are

reported in Table 5.

The interest rate paid on savings deposits did not have a significant impact on holdings of savings deposits in any of the countries. Moreover, the coefficient for the change in the interest rate on savings deposits had the wrong sign. On the other hand, the income coefficient was highly significant for Jamaica and Trinidad and Tobago and was significant at the 10 percent level in Barbados. This lends support to the notion that it is the ability to save which is likely to be the major determinant of the amount allocated to savings deposits.

The coefficient for the interest rate differential in equation (2) was highly significant for Jamaica. This indicates that an increase in the differential would cause individuals to reduce their holdings of savings deposits and increase their holdings of time deposits. On the other hand, changes in the differential would have had no impact on the amounts held in either savings or time deposits in Barbados. In the case of Trinidad and Tobago, an increase in the differential would contribute to an increase in holdings of time deposits, however, unlike Jamaica, the coefficient for the income differential in equation (3) was not significant.

In summary, it would appear that income was the primary determinant of the amounts held in savings deposits in the three countries. In both Jamaica and Trinidad and Tobago, the difference between interest rates paid on time and savings deposits would have had an impact on the amounts allocated to the two types of deposits.

It is accepted that the basic motivation for saving is to enable the saver to accumulate balances which will support a desired level of consumption in the future or facilitate inter generational transfers. To that extent, it is the real rate of interest which ought to have an impact on the decision to save. Higher real rates of interest should encourage saving since it lowers the price of future consumption relative to present consumption.

The large number of studies which have been conducted on savings behaviour in developing countries have failed to establish a definitive link between savings and the real rate of interest(see, for example, Giovannini 1984, Gupta 1987, Fry 1995 and Nelson 1995, for a survey of similar studies for CARICOM countries). these studies have been concerned with real savings behaviour, where real savings are usually measured as real GDP minus private and government consumption. A recent study has found that the sensitivity of savings to real interest rates is related to the level of national income. Specifically, it appeared to be the case, that whereas in low income countries savings appeared to be unrelated to interest rates, there appeared to be a significant relationship between savings and interest rates, once countries moved into the middle and upper middle income category (Ogaki, Ostry and Reinhart, 1996). Jamaica, falls into the category of lower middle income countries, while both Barbados and Trinidad and Tobago are in the upper middle income category.

In Trinidad and Tobago, as indicated in Table 6, real interest rates on both savings and time deposits were negative or zero from 1980 to 1991. In Jamaica, real interest rates on savings deposits were negative in 9 of the 15 years and on time deposits in 7 of 15 years. In Barbados, real interest rates on time deposits were positive from 1982 through 1984. Barbados experienced negative real growth rates

Table 5.
Summary of Estimated Results of Equations 1 to 3.

	$S_d - S_{d-1} = \alpha_1 (I_s - I_{s-1}) + \alpha_2 (Y_t - Y_{t-1})$					
	Barbados	Jamaica Trinidad & Tobago				
a ₁	$(\frac{-1.28}{-0.21})$	$\frac{-48.46}{(-1.80)}$ $\frac{-107.05}{(-1.02)}$				
α_2	$\frac{0.11}{(1.53)}$	$ \begin{array}{r} 0.16 \\ (18.48) \\ \end{array} $ (4.07)				
R² D.W.	0.20 1.64	0.96 0.65 2.72 1.93				
		$S_{d} - S_{d-1} = \beta_{t} I_{d} + \beta_{c} (Y - Y_{-1})$				
	Barbados	Jamaica Trinidad & Tobago				
β_{ι}	(-0.17)	$\frac{-57.15}{(-2.52)}$ $\frac{68.26}{(1.63)}$				
β_2	$\frac{0.11}{(1.63)}$	$ \begin{array}{ccc} 0.17 & 0.13 \\ (18.78) & (4.48) \end{array} $				
R²	0.20	0.97 0.63				
D.W.	1.73	2.46 2.52				
		$T_d - T_{d-1} = \mu_1 I_d + \mu_2 (Y_r - Y_{t-1})$				
$\mu_{\scriptscriptstyle 1}$	Barbados - 0.06 (- 1.19)	Jamaica Trinidad & Tobago 58.45 184.29 (1.42) (4.31)				
μ_2	0.59	0.06 0.02				
R²	(0.10) 0.11	$(3.\overline{52})$ (0.74) 0.70 0.64				
D.W.	1.17	0.98 2.51				

t values are in parentheses

of income in 1981 and 1982, as well as from 1990 through 1992. Trinidad and Tobago experienced negative rates of growth from 1983 through 1989 and again in 1992 and 1993. In all of the countries there were controls on interest rates on savings deposits during the eighties. At the same time the competition from other financial institutions, such as merchant banks, starting in the middle of the decade, led to increases and greater flexibility in rates offered on time deposits by the commercial banks.

In light of these considerations, equations (1) to (3) were re-estimated in order to ascertain the potential impact of changes in the real interest rate, the difference in real interest rates on time and savings deposits and real income, on holdings of time and savings deposits. The results are reported in Table 7. Constant dollar estimates of savings and time deposits in the respective countries

Table 6
Commercial Banks: Real Interest Rates on Deposits

	Barb	Barbados		ica	Trinidad	& Tobago
	Savings	Time	Savings	Time	Savings	Time
1980	- 8.0	- 6.9	- 12.2	- 12.2	~ 11.3	- 73
1981	- 5.8	- 4.7	- 2.6	- 0.1	- 8.3	- 43
1982	~ 3.9	0.2	2.6	4.9	- 6.9	- 23
1983	0.3	2.7	-1.8	1.2	- 8.3	- 52
1984	0.8	2.7	- 9.2	- 5.8	- 6.9	- 40
1985	0.6	1.5	- 2.4	- 2.8	- 2.2	00
1986	1.7	4.6	0.9	0.7	- 3.1	00
1987	- 0.3	3.6	8.1	8.6	- 5.3	- 29
1988	-0.9	2.5	4.6	5.8	-1.8	08
1989	-0.2	2.2	4.1	6.0	- 5.7	- 37
1990	2.3	4.8	~ 1.5	3.9	- 5.5	- 35
1991	1.6	3.0	- 14.3	- 9.3	0.6	25
1992	-1.9	0.9	- 18.0	- 21.8	-1.8	19
1993	3.8	3.8	7.3	16.5	-5.1	- 18
1994	4.9	5.4	- 3.8	-1.6	- 0.6	- 05

Notes: The real interest rate is calculated as $(1+i_n)/(1+\pi)-1$, where i_n is the nominal rate of interest on deposits and π the rate of inflation calculated from the consumer price index. For Barbados, the rates used were the maximum rates on savings and 12 month time deposits. For Jamaica, the rates used were the maximum rates on savings deposits and weighted average rate on time deposits. For Trinidad and Tobago, the average of the median rates on ordinary and special savings deposits and the median rate on 6 month time deposits.

were derived by deflating current values by the consumer price index for each country.

Jamaica was the only country where changes in real interest rates appeared to have had a significant impact on holdings of savings deposits. In addition, an increase in the interest differential had a strong negative impact on holdings of savings deposits. On the other hand it was the only country in which the coefficient for real income was insignificant in all three equations. Trinidad and Tobago was the only one of the countries where the differential in real interest rates appeared to have had a significant impact on holdings of time deposits.

What might account for the apparent insensitivity of holders of time deposits in both Barbados and Jamaica to changes in real interest rates? The average value of these deposits is substantially larger than that for savings deposits. Consequently, one would expect holders of such deposits to be highly responsive to interest rates. The apparent insensitivity of holders of these deposits to interest rate changes may rest in the limited array of financial savings alternatives open to holders of such deposits. Individuals have limited access to fixed income earning assets issued by governments and businesses. The relatively small number of securities traded on the local stock markets also limits the scope for portfolio

Table 7
Impact of Real interest Rates and Real Income on Savings and Time Deposits
Summary of Results from Equations 1 and 3

	$S_a - S_a$	$a_1 = \alpha_1(I_s - I_{s-1})$	$+ \alpha_2(Y - Y_{-1})$	(1)
	Barbados	Jamaica	Trinidad	& Tobago
a_1	5.37 (1.23)	$\frac{28.70}{(2.49)}$	$\frac{-61.68}{(-1.45)}$	
	(1.23)	(2.49)	(-1.45)	
a_2	0.27 (3.05)	<u>- 0.03</u> (- 0.22)	$\frac{0.31}{(2.56)}$	
	(3.05)	(-0.22)	(2.50)	
R² D.W.	0.51 1.89	0.36 1.45	0.39 2.17	
D.W.	1.09	7.40	4.17	
	SS.	$a_{-1} = \beta_1 I_d + \beta_2 (Y -$	· V .)	(2)
	54 -54	-1 - pin + p 2 (1 -	1-1)	(2)
	Barbados	Jamaica	Trinidad	and Tobago
βι	<u>-6.19</u> (-0.68)	<u>-93.65</u> (- 2.40)	<u>153.61</u>	
β₂	(- 0.68) 0.29	(- 2.40) - 0.15	(0.97)	
	$\frac{0.29}{(3.11)}$	(-0.98)	$\frac{0.26}{(2.19)}$	
R² D.W.	0.46 2.47	0.35 1.57	0.20 2.58	
21				
	T ₄ - T, Barbados	$J_{d-1} = \mu_1 I_d + \mu_2 (Y - I_d)$	- Y ₋₁) Trinidad	& Tobago
μ_1	$\frac{1.74}{(0.38)}$	$\frac{5.47}{(0.17)}$	331.03 (3.76)	
μ_2	<u>-0.07</u>	0.02	0.08	
R²	(-1.68) 0.21	(0.17) 0.004	1.30) 0.58	
D.W.	1.80	0.79	2.34	

t values are in parenthesis.

adjustments. The evidence of a higher sensitivity of time deposit holdings to interest rates in Trinidad and Tobago, might be more a reflection of differences in the institutional structure of commercial banking system in that country. As stated earlier, the banks in that country have traditionally offered a broader range of deposits with differential interest payments.

Jamaica was the only one of the countries, where real income changes appeared to have had a minimal impact on holdings of savings deposits. At the same time, the real interest rate appeared to have had a significant impact on holdings of such deposits. It should be noted, however, that not only were the real rates of

interest paid on savings deposits in Jamaica on average substantially higher than that paid in the other countries, the largest year to year changes in rates occurred in that country. As a result, the yearly changes in the amounts held in savings deposits could occur, even with a constant amount saved. Moreover, since the placing funds in savings deposits is the traditional form of savings behaviour for the higher salaried and professional groups, the ones whose income are likely to follow a more stable trend than that of overall national income, this might account for the absence of any significant relationship between changes in national income and savings deposits held by individuals.

Financial Savings and Real Savings

It was indicated in the first section of the paper that the rate of growth of privately held time and savings deposits exceeded that of GDP in both Barbados and Jamaica between 1980 and 1994. Estimates of correlation coefficients between changes in financial and real savings are provided in Table 8. In both Barbados and Trinidad and Tobago, there was a negative relationship. In the case of Jamaica the coefficient had a value close to zero. It has been argued that growth in the value of savings and time deposits might be correlated with consumer wealth and hence, consumption(Schmidt - Hebbel, Serven and Solimano, 1996).

Table 8
Correlation Coefficients: Financial and Real Savings

Barbados -0.144	Trinidad & Tobago - 0.562

It has been suggested, that a major factor contributing to the high savings rates in the East Asian countries, has been the deliberate strategy of governments of those countries to discourage consumption by preventing mortgage markets and other instruments of consumer credit from developing. With limited consumer credit available to purchase housing, consumer durables and other goods, households were forced to save the full amount to finance purchases of these items(Stiglitz and Uy, 1996). There is evidence to suggest that restrictions on the development of consumer credit markets have significant effects on saving and may explain some of the differences in savings rates across countries(Japelli and Pagano 1994).

Let us now turn to a consideration of the extent to which the financial sector in the respective countries functioned to mobilize funds in support of consumption. The amount of funds channelled to support consumption by the financial sector will be measured by the value of assets held by the institutions in the form of consumption loans and residential mortgages. In the case of Barbados and Jamaica, the funds mobilized by the sector in support of consumption was estimated in the following way. Consumer instalment credit provided by the commercial banks, as well as finance and trust companies and loans extended by credit unions. were combined with the amounts allocated by these institutions for residential mortgages. In the case of Trinidad and Tobago, we used the amounts allocated for consumption loans by the commercial banks, finance houses and the mortgage finance companies. In Table 9, estimates are provided of share of funds channelled to the private sector by these institutions for the purpose of supporting consumption activity.

Table 9
Consumption Loans as a Percentage of Total Lending to the Private Sector

	Barbados'	Jamaica ²	Trinidad & Tobago	
1984	30.0	28.2		
1985	32.0	30.2		
1986	34.3	29.7	40.6	
1987	36.1	28.4	39.8	
1988	38.3	27.0	42.2	
1989	37.5	26.4	43.7	
1990	38.0	29.1	45.5	
1991	38.2	28.2	45.3	
1992	39.3	27.6	43.8	
1993	40.6	27.0	45.3	
1994	40.4	29.7	45.7	

Loans made by Commercial Banks, Trust and Mortgage Finance companies, Barbados National Bank, Insurance Companies and Credit Unions.

Source: Central Bank of Barbados, <u>Annual Statistical Digest</u>, 1995; Bank of Jamaica, <u>Statistical Digest</u>, Monthly; Central Bank of <u>Trinidad</u> and <u>Tobago</u>, <u>Statistical Digest</u>, <u>Quarterly</u>.

The Jamaican institutions allocated the smallest share of the funds they directed to the private sector, between 1984 and 1994, in support of consumption. In Barbados, there was significant increase in the share of funds directed toward consumption, between 1984 and 1990. In neither Jamaica nor Trinidad and Tobago, was there any notable trend in the share of funds channelled into consumption. The overall stability in the share of consumption loans in Jamaica disguises other developments in the sector which carry important implications for the sector's role in supporting consumption. For example, the building societies accumulated savings at a more rapid rate than any other entity in the financial sector. In 1984, value of deposits held in building societies amounted to 29 percent of that held by individuals and firms in the commercial banks. By 1994, the value of these deposits rose to 64 percent of that held in the commercial banks. Most of the funds were channelled into residential mortgages. Personal loans rose from 2.4 percent of the assets held by the commercial banks in 1984 to 8.5 percent, in 1994(These estimates were derived from data in various issues of the Bank of Jamaica Statistical Digest). On the other hand, the relative stability in the share of funds directed towards consumption in Trinidad and Tobago was very much reflective of the pattern of lending by the institutions in the sector. Consumer lending by the commercial banks and the finance hoses and merchant banks remained virtually unchanged in the post 1991 period. Furthermore, there was a reduction in the amount of new credit extended by the commercial banks and finance houses and merchant banks (Central Bank of Trinidad and Tobago, Quarterly Statistical Digest, December 1995, Tables C9, D3 and F1).

² Loans made by Commercial Banks, Trust Companies and Finance Houses, Merchant Banks, Building Societies and Credit Unions.

Loans made by Commercial Banks, Finance Companies and Merchant Banks and Trust and Mortgage Finance Companies.

In Chart 1, it is shown that in both Jamaica and Trinidad and Tobago, there was an upward trend in the savings ratio, whereas, there was a downward trend in Barbados. The higher share of funds allocated by the financial sector to consumption in Barbados may account for the declining trend in the share of domestic savings in GDP.

Finally, there is the question of the extent to which the ability of the sector to perform its role effectively might by constrained by the regulatory environment. All of the deposit taking institutions were required to hold cash reserves and secondary reserves in the form of government securities. The secondary reserve requirement was discontinued in Trinidad and Tobago, in 1991. Table 10 provides information on the required liquid asset holdings by the commercial banks, as well as the actual amount of such assets held by those institutions. It can be seen that the commercial bank holdings of these assets in Barbados and Jamaica exceeded the legal requirements in most years. The excess holdings of liquid assets was particularly large in Jamaica. This would suggest that in spite of the regulatory environment in those countries, the sector could have channelled more funds to support investment activity.

Conclusions

There was a limited range of financial assets assessable to the residents of Barbados, Jamaica and Trinidad and Tobago, for the accumulation of financial savings. The majority of residents of these countries were restricted to accumulating financial savings in the form of savings and time deposits. The financial sector in both Barbados and Jamaica accumulated financial savings, as measured by the value of privately held savings and time deposits, at a rate which exceeded that of the growth of GDP. On the basis of this criterion it could be argued that the sector was reasonably effective in mobilizing financial savings. Individuals held their financial savings, primarily, in the form of savings deposits in the commercial banking system. Changes in the nominal rate of interest had no impact on the amount held in savings deposits in any of the countries. However, changes in the real rate of interest did have an impact on the real amounts held in savings deposits in Jamaica.

Barbados was the only country where there appeared to be a significant increase in the share of funds allocated by the sector to support consumption between 1984 and 1994. However, in the case of Jamaica, the institutions within the sector, the building societies, which experienced the largest increase in savings, was concerned in the main in providing funds for residential mortgages.

Nevertheless, the share of funds allocated to consumption spending, ranging from around 30 percent in Jamaica to around 45 percent in Trinidad and Tobago, does not appear to be excessive. Furthermore, the fact that between 1980 and 1990, the commercial banks in both Barbados and Jamaica, held liquid assets, in excess of minimum legal requirements would indicate that funds for productive investments were not being crowded out by consumption loans. This was particularly true in Jamaica. Accordingly, there does not appear to be a strong case for the imposition of draconian restrictions on loans for mortgages and consumer durables.

The financial sector in all of the countries has been reasonably successful in mobilizing savings. The relatively poor economic performance of these countries rest in what would appear the relatively inefficient way in which the savings which have been allocated to investment, has been used.

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Table 10 Commercial Banks: Liquid Asset Holdings as a Percent of Deposits

	Barbados		Jamaica			d & Toba	igo
		Excess %			Excess %		Excess 🕏
	Actual Reg	I Assets'	Actual	Req	Assets	Actual	Req. Assets
1980	28.320	.0 6.4	40.5	29.5	6.1	22.9	16.0 5.1
1981	28.325	.0 2.4	41.9	29.5	8.0	21.9	18.5 2.4
1982	31.527	.0 2.9	38.0	29.5	4.9	28.6	21.3 5.5
1983	28.727	.0 1.0	43.7	36.0	5.6	24.2	22.0 1.6
1984	31.327	.0 3.1	45.2	44.0	0.0	21.6	22.0 - 0.3
1985	30.327	.0 2.7	50.4	48.0	1.1	24.8	22.0 2.0
1986	34.530	1.0 3.2	46.5	38.0	5.8	20.0	20.0 0.0
1987	35.730	.0 3.9	41.3	35.0	4.6	20.0	20.0 0.0
1988	35.330	0.0 4.4	51.0	20.0	20.9	20.2	20.0 0.0
1989	30.430	1.3	36.2	20.0	10.4	17.9	17.0 0.8
1990	31.130	1.8	35.0	32.5	1.2	18.3	17.0 0.9
1991	30.433	1.0 0.3	31.2	20.0	6.0		
1992	35.531	0 4.7	61.8	50.0	6.4		
1993	34.829	0.0 6.7	50.2	50.0	0.1		
1994	31.429	0.0 4.1	60.6	50.0	5.2		

Holdings of government securities in excess of legal minimum requirements. Source: Central Bank of Barbados, <u>Statistical Digest 1995</u>; Bank of Jamaica, <u>Statistical Digest</u>, Monthly; Central Bank of Trinidad and Tobago, <u>Quarterly Statistical Digest</u>.

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