An Examination of Jamaican Building Societies

Issues of Efficiency and Profitability

Prepared by Karlene Bailey

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Abstract

The contraction in profitability and demand for the primary service of building societies in Jamaica over the period of the 1990's has raised concerns as to the continued viability of these institutions. This paper thus explores the developments in the balance sheet and financial ratios of building societies for the 1990's. Of particular interest is the evolution of the interest margin and interest spread of building societies. The results show that building societies faced significant problems of operational inefficiency, which placed a strain on the core earnings capacity of these institutions. The paper concludes that the generation of greater effective demand for mortgage loans is essential for the viability of building societies. Within this context, Government in its role as facilitator can help in promoting public/private sector partnership to provide greater housing solutions.

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** *This is a Working Paper and the author would welcome comments on the current text. The analysis and conclusions drawn are the sole responsibility of the author and not necessarily those of the Bank of Jamaica.*

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1.0 Introduction

Building societies play an integral role in the financial system of Jamaica, acting as savings associations that are primarily organised around the provision of mortgage loans. In terms of assets, building societies are the second largest financial entities in Jamaica next to the commercial banks. Further, these institutions are the largest private sector providers of residential mortgage loans. For the period 1990-2000, building societies showed declining profitability due partly to high operating costs and a decline in the effective demand for mortgage loans. The contraction in profitability and demand for their primary service has raised concerns as to the continued viability of these institutions. In this regard, this paper explores the developments in the balance sheet and financial ratios of building societies for the 1990's. Of particular interest is the evolution of the interest margin and interest spread of building societies over the review period. Importantly, an analysis of these two indicators may help to highlight the challenges facing the building society sector regarding its profitability, efficiency and future growth.

The interest margin is used as an indicator of the profitability of the intermediation process of building societies. It is assumed that the interest spread mirrors the costs and risks imposed on the sector by macroeconomic and regulatory factors, as well as, it acts as an indicator of the internal decision-making processes of building societies. The interest spread is thus decomposed or disaggregated into its various costs to allow for an examination of its primary determinants and the implications for the future operations of building societies. Notably, the impact of the imposition of cash reserve requirement on the size of interest rate spreads is assessed. This is against the argument that unremunerated cash reserve requirements is a financial tax on the revenues and profits of societies and can result in higher lending rates.

The results show that building societies faced significant problems of operational inefficiency, which placed a strain on the core earnings capacity of these institutions. The size of the interest rate spread was significantly affected by high operating costs while reserve costs and loan loss reserves were minor components. Notably, income from loans has shown limited growth or has declined in the context of lower effective demand and

greater competition, which contributed to negative interest margins. It was shown that building societies have increased reliance on income from investments, using these resources to supplement the losses incurred from their traditional intermediation function. That is, the large income from investments has helped to defray the high operating costs and contain increases in the lending rate of building societies.

The main implications of these findings are the need to attain greater levels of operational efficiency through internal reorganisation and the more efficient use of technology. Further, it highlights that the generation of greater effective demand for loans is essential for the viability of building societies if they are to diversify their asset portfolio away from investment activities towards their traditional role as providers of mortgage finance, that is, the creation of real assets. Within this context, Government in its role as facilitator can help in promoting public/private sector partnership to provide greater housing solutions.

The paper is organised as follows, Section 2 provides the institutional, macroeconomic and regulatory environment within which building societies operated in the 1990's. Section 3 analyses the performance of building societies using a balance sheet and financial ratio analysis. Section 4 looks at the interest margin and interest spread of building societies and its determinants. The final section presents the conclusion and policy recommendations.

2.0 The Growth and Development of Building Societies

2.1 Financial Deregulation and Growth of Building Societies (1990-95)

The development of the building societies sector during the period 1990-95 must be viewed against the background of changes in the financial and macroeconomic environment. The process of financial deregulation, which commenced in the mid-1980's culminated in 1990-91 with the dismantlement of the fixed exchange rate mechanism and

a removal of interest rate controls. This financial liberalisation encouraged the growth of institutions in the financial sector and helped to create an intensely competitive environment. Accordingly, many financial institutions sought to pool or expand available resources and services to meet customer needs and guarantee or increase market share. In line with this process of expansion, building societies were established or acquired by other larger financial market players to become a part of large holding companies or conglomerates.

The exemption of building societies from direct regulation by Central Bank authorities, their capacity to mobilise cheap savings coupled with taxation differentials on savings were salient factors favouring the acquisition and establishment of this type of institution by other market players. In contrast to the regulations faced by banks and near banks, the Building Societies Act of 1897, which governed the operations of these institutions did not stipulate prescribed conditions for licensing and capitalization of building societies. The differential in the regulation of these two sets of institutions was further widened in the early 1990's[1] as banks faced increased prudential requirements. Building societies were also able to mobilise large savings, in spite of below market deposit rates, aided by a strong branch network in Jamaica and overseas. Further, goodwill built up as a result of their traditional record in providing funding for residential mortgages at a more affordable rate than other institutions helped to maintain the deposit base of the societies. Johnson (1995) also noted that building societies enjoyed taxation benefits not available to other institutions such as the exemption of interest paid on savings from withholding tax and a preferential corporate tax rate of 30 per cent instead of the 33 1/3 paid by banks[2]. Consequently, for the period 1990-95, twenty eight (28) new building societies were established, bringing the total number to thirty-four (34).

The establishment of these new entities had implications for the organisational structure and regulation of the building societies sector. Traditionally, building societies in Jamaica

[1] Banking Act was amended in 1992 to allow for a more standardised legal framework of operations for banks. There was an increase in the minimum subscribed and paid up capital, compulsory provisioning for non-performing loans and increased ministerial powers over commercial banks.

[2] Preferential tax rate applicable to societies that maintain a reserve to assets ratio of less than 5 per cent.

were mutual organisations i.e. societies owned by savers who hold share accounts. These mutual societies were not significantly profit driven and focussed on making sufficient returns to build up reasonable levels of reserves. In contrast to these mutual organisations, many of the newly established societies were mainly proprietorships. Many of the newer societies were owned by holding companies or larger conglomerates, which often comprised a commercial bank, merchant bank or insurance company. As noted by Stennett, Batchelor and Foga (1999), these conglomerates exhibited complex structures of inter-company shareholdings, interlocking boards of directors, common management and extensive inter-group transactions. In the absence of an optimal regulatory and supervisory framework for the financial sector this type of financial structure created additional problems for the sector.

These new institutions also exhibited a tendency to offer banking type services along with traditional mortgage financing. In addition, these newly established building societies seemed to diverge from the traditional mortgage lending focus of the long established societies. Johnson (1995) noted that newer societies showed high levels of investments in government securities while at the same time employed a lower proportion of their savings funds in making loans. Thus, while there was an overall greater savings mobilisation by the sector, the pool of funds channelled into mortgage lending had declined. These trends created concerns about the distortion of the traditional role of building societies and the use of these institutions as a storehouse of investment funds by their holding companies.

2.2 *The Impact of Changes in the Regulatory, Financial and Macroeconomic Environment on Building Societies*

The significant growth and innovations that had taken place in the building societies during the early 1990's made it apparent that the legislation governing this sector was inadequate. Further, the failure of a small building society that was a part of a financial group highlighted the need to ensure the protection of depositors in this segment of the

financial market. Therefore, by March 1994 building societies were designated as "specified financial institutions" under the Bank of Jamaica Act which gave the Central Bank the power to supervise and examine their operations.

By March 1995, the Act[3] was further amended to allow for the licensing of building societies by the Minister of Finance. The new regulations also stipulated a mandatory minimum subscribed capital for building societies, as well as, a requirement to establish appropriate reserves for non-performing loans. During 1995, twenty-four (24) building societies applied for licences out of a total of thirty-four (34) incorporated societies. However, at the end of 1996 when the licensing process was completed, only fifteen (15) entities were granted approval to operate. The failure of many building societies to meet the new licensing requirements suggests that the majority of the small newly established institutions were undercapitalised.

The new legislation also stipulated minimum statutory cash reserve and liquid assets requirements for building societies. Initially the regulatory authorities imposed a system of dual cash reserves on building societies with the ratio ranging between 1 and 11 per cent. The higher cash reserve ratio was applied to those societies whose investments in residential housing fell below a prescribed ratio of 27 per cent of deposits and withdrawable shares. The differentiated cash reserve requirement, by favouring a particular asset portfolio composition was intended to provide incentives for building societies to focus on their core function of providing financing for the residential mortgage market. At the same time, the regulations sought to restrain the financing of commercial or other forms of lending by building societies and the concentration of funds in securities investments[4]. Notably, many of the societies found it difficult to meet the requisite residential mortgage loan to savings ratio, which would have allowed them to qualify for a lower cash reserve ratio. In 1997, of the ten (10) existing societies only six (6) societies qualified for the lower cash reserve ratio. The inability of the other four

[3] Cited as the Bank of Jamaica (Building Societies) Regulations, 1995.

[4] The qualifying residential mortgage threshold was increased to 40 per cent by 2000 while the cash reserve requirement ranged between 1 per cent and 14 per cent.

institutions to attain the prescribed level of mortgage loans was partly due to their focus on investments and other lending activities.

The imposition of an unremunerated cash reserve requirement was objected to by many building societies on the grounds that the requirements effectively placed the operations of the industry on a similar plane to the commercial banks. It was argued that the new regulatory regime was inappropriate, as building societies were long-term mortgage lenders, in contrast to commercial banks that operated principally in the short to medium term loan market. It was also noted that building societies were the only private long-term financial institutions committed to investing a substantial part of their assets in housing finance. Further, it was argued that the cash reserve requirement was in effect an indirect financial tax on the profits of the building societies and would adversely affect the interest rate spread of these institutions. The argument was that building societies in the face of competition from other institutions for loans may either find it difficult to adjust their deposit rates downwards or hike their loan rates to mitigate the effect of the cash reserve ratios.

The structure and operations of the building society industry was also significantly affected by the emergent financial sector crisis in 1996. Given the linkages within financial groups, the problems that emerged with commercial banks and insurance companies quickly spread to their affiliate building societies. As a consequence, small building societies that were subsidiaries of other institutions were closed or placed under temporary management. As the efforts of the regulatory authorities progressed towards the restructuring and consolidation of the financial sector, the operations of small, weak societies were merged and their assets transferred or sold. By the end of 1998, there were eight (8) building societies in comparison to ten (10) in 1997. As the rationalisation process continued the number of building societies was reduced to five (5) by 2000.

Another factor that adversely affected the building societies was the harsh macroeconomic environment, particularly the existence of high real interest rates and the downturn in economic activity. High real interest rates, which resulted from

contractionary monetary policy, increased the intermediation costs of building societies by placing an implicit floor on deposit rates. At the same time, negative growth in GDP that characterised the late 1990's also adversely affected the effective demand for mortgage loans. Building societies were thus faced with a more difficult task in meeting the required ratio of mortgage loans to savings funds.

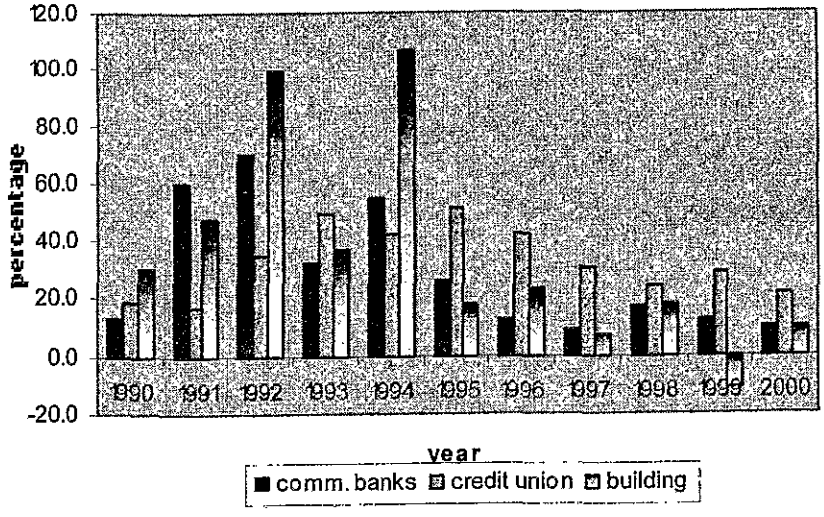
3.0 Evaluation of the Performance of Building Societies in the 1990's

3.1 Balance Sheet Analysis

The assets of building societies grew significantly during the period 1990-95, surpassing the growth rate of the other main deposit taking institutions in the financial system. Between 1990-95, average annual growth of assets was 64.2 percent for building societies relative to 45.9 per cent and 35.4 per cent for commercial banks and credit unions, respectively. The strong growth in the assets of societies was primarily attributable to the large increase in the number of building societies between 1990-95. However, in the latter half of the 1990's, with the consolidation in the building societies industry there was a decline in the rate of growth of assets. Between 1996-2000, the average rate of growth in the assets of building societies was 9.5 percent in contrast to 29.3 per cent and 12.1 per cent for credit unions and commercial banks, respectively.

Figure 1

Growth in Assets/Liabilities of Financial Institutions for 1990-2000



There was an also increase in the savings flowing to building societies during the period 1990-95. However, as was the case with their assets, in the latter half of the 1990's there was a marked decrease in the rate of growth of savings. As shown in Table 1, the flow of savings funds to building societies rose to $70.2 billion in 1995 from $2.3 billion in 1990. Net savings also increased, with an average savings retention ratio of 16.0 per cent for the period 1990-95. The savings retention ratio is net savings as a percentage of total savings.

Table 1.

Savings Flow of Building Societies

Year	Total Savings J$MN	Growth (%)	Net Savings J$MN	Savings Retention Ratio (%)
1990	2,305	35.1	259	11.2
1991	3,428	48.7	584	17.0
1992	9,677	182.3	3,213	33.2
1993	18,799	94.3	2,068	11.0
1994	41,306	119.7	8,149	19.7
1995	70,198	69.9	955	1.4
1996	51,778	-26.2	3,304	6.4
1997	71,055	37.2	4,024	5.7
1998	88,022	23.9	214	0.2
1999	63,789	-27.5	(3,247)	-5.1
2000	57,895	-9.2	1,595	2.8

Source: Statistical Digest and author's computations.

By 1996, with the fallout in the building societies sector, there was a large reduction in the savings flow of building societies of approximately 26.2 per cent. As shown in Table 1, the savings mobilisation efforts of the building societies was given a boost between 1997-98 as the problems of the commercial banking sector adversely affected the confidence of depositors in those financial institutions. This development resulted in a shift in savings from commercial banks to building societies and credit unions.

However, this trend was not sustained as savings declined to $63.8 billion at the end of 1999 from $88.0 billion at the end of 1998. The significant contraction in savings inflows and net savings in 1999 can be partly attributed to the imposition of withholding tax

measures[5], which resulted in depositors moving their funds in search of more attractive interest rates. The imposition of withholding tax resulted in increased competition for deposits from other financial institutions, especially credit unions. Thus by the end of 2000, total savings inflows had further declined to $57.9 billion with a savings retention ratio of 2.8 per cent. Building societies like other financial institutions traditionally face a mismatch of assets and liabilities, which results from the mobilisation of short-term funds to lend at long horizons. However, in the context of a decline in savings mobilisation rate and lower retention ratios, the implications for the asset/liability management of building societies is more pronounced.

The value of loans disbursed by building societies showed a general increase during the first half of the 1990's. As shown in Table 2, loans rose to $6.4 billion in 1996 from $519 million at the end of 1990. However, by the end of 2000 loans disbursed had significantly declined to $3.0 billion.

Table 2

Building Society Loans Flows

Year	Loans (J$MN)	Repayments (J$MN)	Net Loans (J$MN)	No. of Loans	Avg. Loan Size (J$MN)
1990	519	151	367	2281	0.266
1991	742	211	530	2598	0.285
1992	908	307	601	2719	0.333
1993	1,272	410	862	2609	0.487
1994	3,881	1,347	2,534	4629	0.838
1995	3,601	1,173	2,427	3907	1.220
1996	6,429	3,695	2,733	2954	1.150
1997	7,829	7,015	814	4893	0.549
1998	3,106	2,828	278	1372	1.377
1999	3,396	3,444	(48)	1888	1.186
2000	3,026	1,933	1,093	2449	1.066

Source: BSAJ and Statistical Digest

[5] Withholding tax on interest earned on savings imposed at a rate of 15 per cent effective June 1999. The total withholding tax rate of 25 per cent was imposed effective June 2000.

Similarly, the net loan position of building societies also exhibited strong increases for the period 1990-96. However, given steady repayments and the decline in the number of loans disbursed, the net loans of building societies were significantly reduced in the latter part of the 1990's. Notably, with the exception of 1997[6], there was a general decline in the number of loans made in the late 1990's. This decrease can be partly explained by the closure of many building societies as well as lower effective demand for mortgage loans. While the number of loans made has fluctuated over the review period, the average size of loans disbursed rose sharply reflecting the escalation in real estate and construction costs. At the end of 2000 the average size of a residential loan was $1.06 million relative to $0.26 million in 1990.

Notably, low and moderate-income groups accounted for a declining share of the loan portfolio of societies despite being the most significant proportion of savers[7]. Given the growth in construction costs and the decline in real income, there was a substantial increase in the gross monthly income needed to qualify for a loan. At the end of 1995, it was estimated that a gross monthly income of $52,500[8] was needed to qualify for an average mortgage loan. For shareholders in building societies saving over a long period to guarantee more favourable interest rates, the monthly payments and gross monthly income needed to qualify for loans are still prohibitive factors.

Table 3 shows a mortgage repayment schedule that outlines the monthly income needed to qualify for a mortgage loan and the applicable loan rates at the end of 2000. The price for a "medium-sized" housing development[9] is used with the assumption that the building society will finance 80 per cent of the price of the house. The highest rate of 21 per cent would be applicable to non-savers and the lowest rate to long-term savers in a building society. It is shown that the gross monthly income needed to qualify for a mortgage loan has more than doubled since 1995, with the monthly repayments (excluding insurance)

[6] The outturn for 1997 was due primarily to the activities of one large traditional building society, which had provided loans for a large housing development.
[7] The professional and managerial group accounted for over half of the total mortgages allotted in 1992 according to survey conducted by Building Societies Association in 1992.
[8] See BSAJ Fact Book for 1995.
[9] Medium sized housing development referred to a two-bedroom house outside of Kingston.

also at very high levels. Notably, the higher monthly payment and monthly income estimates refer to the loan term of ten (10) years. As the number of years for payment rises the monthly obligations of the borrower are lower.

Table 3

Mortgage Payment Schedule

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Price of Property	$2,500,000	$2,500,000	$2,500,000	$2,500,000
Loan Amount	$2,000,000	$2,000,000	$2,000,000	$2,000,000
Loan Term	10-15 years	10-15 years	10-15 years	10-15 years
Interest Rate	21%	19.75%	18.75%	17%
Monthly Payment	$36612 to $39986	$34752 to $38320	$33293 to $37008	$30780 to $34760
Gross Monthly Income	$122040 to $133287	$115857 to $127733	$110977 to $123360	$102600 to $115867

Source: Author's computations

Given the high outlay associated with a mortgage, the cost of obtaining a house is prohibitive for the average income earner. For example, the average monthly earnings of all persons employed in large establishments for 2000 was $29,112. As a result persons wishing to qualify for a mortgage loan may have to combine resources with family members or other persons. Hence, many societies despite maintaining strong marketing programmes have experienced difficulties in generating effective demand for their product. This challenge facing the sector is compounded by economic downturn and greater job uncertainties.

Building societies, for several years, financed the majority of mortgages in the financial system and through co-financing agreements with the National Housing Trust (NHT)[10] have sought to ease the burden of mortgage payments for many persons. Through co-financing schemes, clients are able to borrow from a building society at one rate and the NHT at a lower rate, which serves to lower the overall cost of loan servicing. During the period 1990-95, given the large numbers of building societies, the value and number of

[10] The National Housing Trust is a statutory organisation, which was formed in 1976 with the aim of providing financing for low-income housing. Contributions to the NHT are deducted directly from the salary of employed persons.

mortgages provided by building societies exceeded that of the NHT (See Table B in the appendix). However, the late 1990's evidenced a reversal of this trend with the NHT providing 4,857 mortgages in 1996 compared to the 2449 by building societies at the end of 2000. The lowering of mortgage rates by the NHT to levels significantly below the preferred savers rate of the building societies contributed significantly to this outturn. The rates charges by the NHT range between 2-12 per cent compared to the building societies preferred rates of 15-17 per cent. Although the NHT has overtaken the building societies as the largest provider of mortgages, the co-operation between these two institutions can be seen as mutually beneficial.

3.2 Financial Ratio Analysis

Financial ratio analysis allows for an assessment of the operating performance of building societies over time by relating income and expense to the appropriate balance sheet items. Table 4 presents selected financial ratios that highlight the earnings, operational efficiency and the use of funds by building societies. These ratios are also calculated by sub-dividing the industry into two groups: the large well-established societies (traditionals) and the small firms incorporated in the 1990's (non-traditionals).

Firstly, the loans/total assets and investments/total assets ratio were used to highlight the allocation of funds by building societies. As shown in Table 4, for all building societies the loans/assets ratio averaged 37.2 percent while the investments/assets ratio was 36.8 per cent for the period 1990-2000. These ratios diverged significantly from the levels attained by the international benchmark savings associations[11]. As a whole, building societies allocated a greater proportion of their funds to investments relative to the international benchmark of 10 per cent. The allocative decisions of building societies throughout the 1990's were influenced by the high interest rates paid on government securities. Being relatively risk-free instruments, government securities provided a viable

[11]Small savings associations in the United States with primary focus of providing residential mortgage loans were used as benchmarks.

alternative to the more risky investment in loans. Further, building societies have been faced with a reduction in effective demand for mortgages given the downturn in the economy and the high costs of housing.

Table 4

Financial ratios (1990-2000)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Benchmark
Earnings Perfomance													
Pre-Tax Profit Margin	12.8	12.4	12.3	7.5	7.3	5.9	5.6	-1.5	-0.6	8.2	11.8	**7.4**	**11.5**
Traditional	13.0	10.3	13.7	14.7	13.4	13.7	8.4	8.5	12.1	12.4	9.8	**11.8**	
Other	4.9	60.0	6.8	-5.4	1.7	-0.6	2.3	-19.3	-23.0	-7.4	25.5	**4.1**	
Allocation and Use of Funds													
Loans/Total Assets	53.7	48.1	33.0	27.4	26.9	32.7	43.1	41.9	33.9	35.3	33.5	**37.2**	**72.5**
Traditional	54.4	49.0	41.0	38.5	42.7	42.9	52.6	46.9	41.2	36.3	32.9	**43.5**	
Other	27.0	29.1	6.5	5.4	12.1	18.2	28.6	29.8	17.7	28.6	37.4	**21.9**	
Liquid Assets/Total Assets	42.5	38.3	44.4	46.5	46.4	35.1	26.8	28.0	38.3	30.3	27.9	**36.8**	**10.0**
Traditional	42.0	37.0	40.5	41.0	47.1	47.2	24.5	23.2	26.4	29.5	28.4	**35.1**	
Other	64.0	65.9	57.5	57.5	45.7	17.9	30.2	39.7	64.3	35.4	24.2	**45.7**	
Efficiency and Cost Control													
Operating Efficiency Ratio	15.3	14.0	14.5	17.0	16.4	22.0	19.3	17.8	18.6	17.3	15.3	**17.0**	**6.6**
Traditional	15.3	14.4	14.9	15.2	15.2	15.6	16.7	14.5	15.1	15.0	15.5	**15.2**	
Other	16.0	6.3	13.5	20.5	17.5	31.1	23.3	25.6	26.3	32.6	14.0	**20.6**	
Non-Interest Expense Ratio	4.4	4.0	3.7	3.7	2.8	3.7	3.8	5.6	4.6	5.5	5.8	**4.3**	**2.66**
Traditional	4.4	4.0	4.6	4.9	5.2	5.1	4.9	5.0	5.2	5.7	6.3	**5.0**	
Other	3.8	3.4	0.8	1.2	0.6	1.8	2.1	7.1	3.2	4.1	2.7	**2.8**	
Interest Expense Ratio	10.9	10.0	10.8	13.3	13.6	18.3	15.5	12.1	14.0	11.8	9.5	**12.7**	**4.1**
Traditional	10.9	10.3	10.2	10.3	10.0	10.5	11.8	9.5	9.9	9.3	9.2	**10.2**	
Other	12.2	2.9	12.7	19.2	16.9	29.3	21.2	18.5	23.1	28.4	11.3	**17.8**	

A disaggregation of these ratios also showed that the traditional building societies allocated a greater proportion of their funds to loans relative to the non-traditional societies, which maintained a greater focus on investments in securities. It is noteworthy that the imposition of regulation regarding the level of mortgage loans to prescribed

liabilities had a significant effect on the allocation of funds to investments, especially by non-traditionals. Since 1996, there has been a general decline in the liquid assets (investments)/assets ratio and a subsequent increase in the loans to total assets ratio of non-traditionals. The loans/assets and investments/assets ratio were 37.4 per cent and 24.2 per cent, respectively, at the end of 2000. This compares with the 28.6 per cent and 30.4 per cent that existed at the end of 1996.

The operating efficiency ratio, which is defined as total operating expenses (interest and non-interest) as a percentage of total assets, was used as an indicator of the effectiveness of resource management. A high ratio is usually indicative of significant inefficiencies. For the review period, building societies as a whole experienced relatively no efficiency gains as operating costs to assets rose over most of the 1990's. The average efficiency ratio for the system was 17.0 per cent relative to the benchmark international ratio of 6.6 per cent. Traditional building societies were able to better contain their operating expenses relative to non-traditional societies. The operating efficiency ratio for traditional societies was 15.2 per cent relative to 20.6 per cent for non-traditionals.

The interest expense ratio shows the costs associated with funding assets and was used as an important indicator of the ability of building societies to control expenditure. This ratio is defined as interest expense divided by total assets. As shown in Table 4, the interest expense ratio for the system increased steadily between 1990-96. However, for the latter half of the 1990's there was a decline in the cost of funding assets, which reached 9.5 per cent by the end of 2000. For all building societies, the average cost of funding assets for the period 1990-2000 was 12.7 per cent, which is significantly higher than the international average of 4.1 per cent. Notably, the average cost of funding for the system was significantly influenced by the outturn for non-traditional societies. While traditional societies were able to obtain relatively low cost share savings funds, non-traditionals faced increasing interest costs of funding and large borrowing expenses. The low costs of raising funds incurred by traditional societies was as a result of the strength of their branch networks and established market share.

The non-interest expense ratio for all building societies averaged 4.3 per cent for the review period in contrast to the benchmark ratio of 2.6 per cent. A disaggregation of the performance of the industry shows that while both traditional and non-traditional societies experienced increases during the latter half of the 1990's, there was a greater increase in the non-interest expenses of traditional societies. The average non-interest expense ratio for large societies was 5.0 per cent relative to 2.8 per cent for non-traditional societies. Traditional societies face greater costs associated with branching and staff expenses.

Table 4 also presents the returns that flow to building societies as measured by the pre-tax profit margin. This ratio is defined as the pre-tax profits divided by total operating income. A high pre-tax profit margin is desirable as it shows that a greater proportion of revenues are flowing through to net income. On a system wide basis, the pre-tax profit margin averaged 7.4 per cent for the period 1990-2000 compared to the benchmark international ratio of 11.5 per cent. This ratio shows that earnings were stronger during the early 1990's relative to the outturn towards the end of the period. However, there was a trend towards a general decline in profit margins over the review period, with negative margins between 1997-98. Between 1999-2000 there was a recovery of profit margins, which may be attributed to the elimination of the more unprofitable entities from the sector.

A disaggregation of the pre-tax profit margin clearly shows a better earnings performance by traditional building societies relative to non-traditional institutions. For non-traditional building societies, there was significant variability in earnings, with an average pre-tax profit margin of 4.1 per cent. On the other hand, traditional societies had an average profit margin of 11.8 per cent. The pre-tax profit margin of non-traditional societies may have been adversely impacted by the large interest costs sustained by these institutions in raising funds for their operations relative to the moderate growth in income from investments and loans. Overall, this ratio indicates that traditional building societies were better able to maintain adequate earnings performance despite pressures from the higher

cost of intermediation, increases in operating expenses and lower effective demand for their loans.

The profitability and efficiency ratios taken as a whole indicate that there are significant cost advantages and greater efficiency gains associated with large building societies. Therefore, while all building societies faced the same challenges from changes in the macroeconomic and regulatory environment, traditional building societies were able to reap the gains from economies of scale, greater public confidence and established market share.

4.0 The Interest Rate Margin and Spread of Building Societies

4.1 Interest Margins

Hanson and Rocha (1986) in their studies of costs and margins employed a particular aggregation of the items in the income and expenditure statement. This methodology allows for the derivation of the interest and gross margins of building societies as shown in Table 5.

Table 5

Selected Income and Expenditure of Building Societies (J$'MN)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1. Interest on Loans	246.13	349.63	504.83	699.15	1103.66	2246.62	3030.83	3526.09	3049.00	2852.11	2836.75
2. Interest on deposits	324.60	437.65	943.80	1836.14	3566.84	5323.19	5006.13	4017.68	4057.16	4180.18	3991.93
3. Interest Margin (1-2)	-78.47	-88.02	-438.97	-1136.99	-2463.18	-3076.57	-1975.29	-491.59	-1008.16	-1328.07	-1155.18
4. Other Income	260.83	360.20	945.01	1834.90	3546.19	4552.59	4264.78	3078.94	5135.04	4653.78	4535.60
Investments	237.76	274.51	788.40	1445.73	3252.95	3514.92	2864.13	1921.25	3564.98	2899.78	3047.13
Other	23.07	75.69	156.61	389.17	293.23	1047.67	1400.65	1157.69	1570.06	1754.00	1488.47
5. Gross Margin (3+4)	182.36	262.18	506.03	697.91	1083.01	1486.03	2289.49	2587.36	4126.88	3325.70	3380.42

The interest margin is defined as the difference between the interest income earned from loans and the interest paid out on deposits. As such it measures the profitability of the intermediation process of building societies. As shown in Table 5, the interest margin for building societies was consistently negative throughout the 1990's, which suggests that the primary business of building societies i.e. the provision of mortgage loans was not sufficient to meet the costs of mobilising savings funds. While interest income from loans grew to $2,836 million at the end of 2000 from $246.0 million for 1990, the interest expenses grew at a faster rate. The annual average growth rate for interest income was 32 per cent, while interest expenses grew at an annual average rate of 36 per cent. Interest paid on deposits increased to $3,991.9 million in 2000 from $324.6 million in 1990.

The performance of interest income from loans was adversely affected by low effective demand for mortgage loans and greater competition. As previously discussed, the increase in the monthly mortgage repayments and the level of gross monthly income needed to qualify for a loan, as well as, the slowdown in the economy, reduced the demand for loans from building societies. Given the losses incurred in their core business, building societies supplemented their income and maintained positive gross margins through investments in Government securities and other assets. In this regard, investment income at the end of 2000 totalled $3,047.1 million in contrast to $237.7 million at the end of 1990.

An examination of the interest spread of building societies allows for a better understanding of the costs associated with intermediation. Further, the evolution of the deposit and loan rates of these institutions yields important insights into the factors that resulted in higher interest expenses and the lowering of interest income.

4.2 Implicit Interest Rate Spread

The implicit interest rate spread is estimated from the accounting data of financial institutions and is the most widely used measure of the net spreads of financial institutions. The implicit interest rate spread is calculated by the following formula:

$$Spread = R_l - R_d$$

where

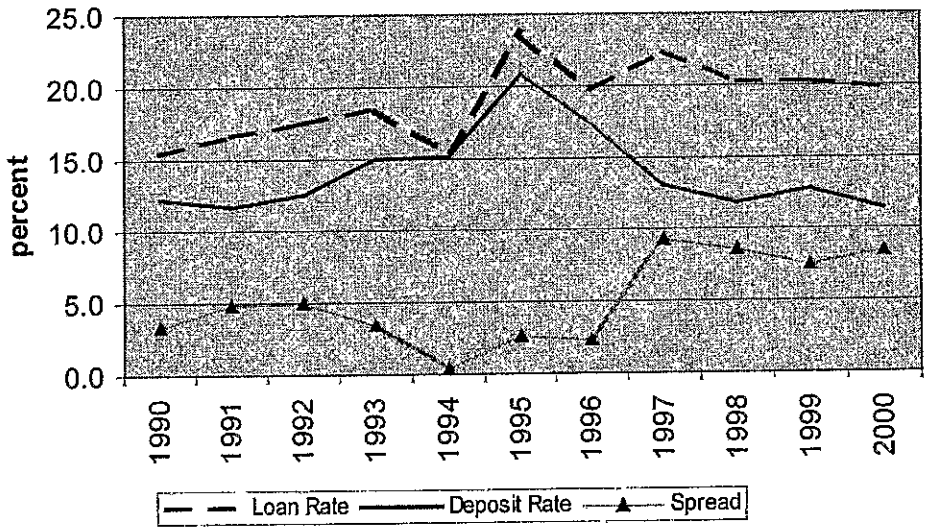
R_l= Interest income from loans/total loans

R_d=Interest expense due to deposits/total deposits

Interest rate spreads are used as an indicator of the cost and efficiency of the intermediation process. Specifically, the interest spread is the difference between what banks and other financial institutions charge borrowers and pay their depositors. The size of the interest spread reflects the need to cover operating costs and to maintain the profit levels of a financial firm.

Figure 2

Implicit Interest Spread



As shown in Figure 2, the implicit interest spread increased between 1990-92. However, between 1993-95 the spread generally declined. The movements of the spread during this period (1990-96) were strongly affected by changes in the deposit rates offered by building societies. The deposit rate rose between the periods 1990-95 from 12.2 per cent to 20.9 per cent. The increase in deposit rate can be partly attributed to the process of financial liberalisation, which resulted in financial deepening and greater competition between building societies and other financial institutions for savings funds. In addition, the instability in the macroeconomic environment as a result of exchange rate depreciation and high inflation had a significant impact on the determination of interest rate spreads.

Specifically, high inflation rates adversely impacted the interest costs of the societies by implicitly placing a floor on deposit rates. This deposit floor was reinforced by a sharp rise in real interest rates due to the tightening of monetary policy to counter the high inflation rate. For building societies, mobilising savings meant competing against the high interest rates offered on government and Central Bank securities.

For the period 1990-95, the implicit loan rate for building societies increased to 23.6 per cent from 15.4 per cent in 1990. However, the loan rates charged by building societies remained significantly lower than the prevailing rates at other financial institutions. The implicit loan rate for commercial banks was 30.4 per cent at the end of 1995 relative to 25.7 per cent for 1990. In many cases, the high real interest rates offered on risk free government securities set a benchmark for lending rates of commercial banks and other financial institutions. Financial institutions would then add a mark-up to this rate to compensate for, among other considerations, the risk profile of the borrower and operating costs. Notably, the rate on a six-month Treasury bill at the end of 1996 was 25.21 percent. (See Table A in appendix)

Offering low mortgage rates to borrowers while increasing the deposit rate translated into greater volatility in the interest spread of building societies during the early 1990's. Notably, the deposit rate was more correlated to changes in the spread than the loan rate.

It was found that the societies' funding costs led any adjustments in the loan rates. Therefore, when liquidity conditions tightened, deposit rates increased causing the building societies' cost of funds to rise. In response, building societies would raise their loan rates. Conversely, this meant that any shock that resulted in a higher spread may have led to a decrease in deposit rates rather than an immediate increase in the loan rate.

For the period 1997-2000, there was an increase in the interest rate spread of building societies, which was maintained throughout the period. The main impetus for the increase in the spread was the significant lowering of deposit rates, while mortgage rates remained more or less at their previous levels. The lowering of these deposit rates may have been as a result of the lowering of the benchmark government securities rate, a reduction in inflation and greater relative stability in the exchange rate. Notably, the increase in the interest spread also coincided with the introduction of the cash reserve ratio and the subsequent hikes in this requirement over the period. It could be argued that building societies were obliged to maintain a high interest rate spread to compensate for the holding of unremunerated reserves against their deposits. The extent to which this argument is valid can be ascertained by disaggregating the interest rate spread.

4.3 Decomposition of Interest Rate Spreads

The income and expenditure statement and the balance sheet of building societies provide a simple framework for the decomposition of the interest rate spread into its various components-operating costs, cash reserve requirements and other costs. From the income statements of the building societies one can write the following accounting identity:

$$PL = IR + NI - IP - OC - LL$$

Where:

PL profit before taxes

IR interest income

IP interest expense

NI non-interest income and all other income (investments)

OC operating costs

LL provision for loan losses

This identity can be rearranged and expressed as:

$$IR\text{-}IP = OC + LL + PL - NI$$

Randall (1998) noted that interest income can be derived from the average lending rate times the average volume of loans while interest expenses is equivalent to the average deposit rate times average deposit liabilities held by building societies. Further, it is assumed that the ratio of loan to deposits is equal to one minus the reserve ratio. Therefore dividing equation 2 by average deposits (D) as a scaling factor and using loans (L) and assets (A) we can derive the following equations:

$$\frac{IR}{L} * \frac{L}{D} - \frac{IP}{D} \equiv \frac{OC}{D} + \frac{LL}{D} + \frac{PL}{A} * \frac{A}{D} - \frac{NI}{D}$$

$$R_L - R_D = \lambda R_L + \frac{OC}{D} + \frac{LL}{D} + ROA * \frac{A}{D} - \frac{NI}{D} + \frac{\varepsilon}{D}$$

Where:

$\frac{L}{D} = (1 - \lambda)$

$\frac{IP}{D} = R_D$

$\frac{IR}{L} = R_L$

$\lambda = reserve \quad ratio$

$\varepsilon = residual$

$ROA = Return\ on\ Assets$

The residual (ε) is used to account for the substitution of implicit interest rates for actual rates, as well as, errors that may arise from combining flow data from income statements with stock data from the balance sheet. Further, it accounts for the simplifying assumption that loanable funds are comprised of deposits net of required reserves.

According to the above expression, the spread is composed of reserve costs, operating costs generated by societies in the intermediation process, loan loss reserves and profit/losses net of non-interest income and all other income. A priori expectations indicate that a positive correlation exists between the net interest spread and operating costs, reserve costs and loan loss provisions. For example, if the administrative expenses associated with the process of disbursing loans increase or there is greater need for loan loss provisioning, then it is expected that the price of loans will rise. Similarly, as reserve requirement rise, building societies will transfer this cost to the interest spread. Hanson and Rocha (1986) further noted that operating costs and profits are structural causes that partially underlie the level of interest rates charged by financial firms and are important parts of the interest rate spread. These components, they noted, are also important indicators of financial sector efficiency and if excessive can represent a misallocation of income.

Table 6 presents the results of the decomposition of the interest rate spread for the period 1990-95. There were no cash reserve or provision for loan loss requirements imposed on building societies over this period given that they were largely self-regulated. As such, the available accounting data failed to break out any provisioning for loan default made by building societies. In the context that these institutions were not obliged to provide for loan loss and the fact that provisioning increases the non-interest expenses of societies, it is assumed that the contribution of loan loss reserves to the interest rate spread was negligible. The residual is assumed to capture the effects (if any) of loan loss reserves on the interest spread.

Non-interest income and all other income (NI) increased significantly over the period, and was the most stable and significant contributor to the net spread. The increase in NI

can be mainly attributed to growth in income from investments. Turning to the cost components, it was noted that operating costs were a significant proportion of the net spread, averaging 4.2\per cent. The significant levels of income earned from investment (NI) therefore helped to contain the increase in the interest spread, which these high operating costs would have necessitated. The decline in the return on assets (ROA) to 1.4 per cent from 2.2 per cent at the beginning of the period also contributed to a lower spread.

Table 6

Decomposition of the interest rate spread in percentage (1990-95)

	1990	1991	1992	1993	1994	1995	AVG
Average Loan Rate	15.4	16.6	17.5	18.5	15.6	23.6	17.9
Average Deposit Rate	12.2	11.7	12.5	15.0	15.2	20.9	14.6
Interest Spread	3.3	4.9	5.0	3.5	0.4	2.7	3.3
Operating Costs	4.9	4.7	4.3	4.1	3.2	4.3	4.2
ROA *(A/D)	2.4	2.3	2.4	1.6	1.4	1.6	2.0
Non Interest and Other Income	11.0	11.0	12.5	15.0	15.1	17.9	13.3
Residual	7.0	9.0	10.8	12.8	10.9	14.7	10.4
ROA	2.2	2.0	2.0	1.4	1.3	1.4	1.7

The interest spread for the period 1996-2000 was affected by changes in the regulatory environment governing building societies with the introduction of mandatory provisioning for loans and cash reserve requirements. As mentioned before, the reserve requirement imposed on individual building societies varied according to the extent to which each institution satisfied the required ratio of residential loans to deposits. Building societies that met the prescribed threshold faced the lower 1 percent cash reserve ratio. Table 7 presents the decomposition of the interest spread using the average ratio for all building societies.

The disaggregation of the spread based on those societies that faced the higher cash reserve requirement (non-compliant) versus those that qualified for the lowest cash

reserve ratio (compliant)[12] are presented in Tables 8 and 9. The rationale for the disaggregation is that using the average cash reserve ratio may actually conceal the higher reserve costs faced by building societies that have not been able to comply with the prescribed liabilities ratio.

Table 7

Decomposition of the Interest Rate Spread in percentages (1996-2000)

	1996	1997	1998	1999	2000	AVG
Average Loan Rate	19	22	19	19	18	19.6
Average Deposit Rate	17	13	12	13	11	13.3
Interest Spread	**2.1**	**8.8**	**7.6**	**6.6**	**6.9**	**6.4**
Cash Reserves	0.7	0.9	0.7	0.8	0.2	0.7
Operating Costs	6.2	6.4	10.6	6.5	5.2	7.0
Provisions for loan loss	0.1	2.0	1.2	1.2	1.0	1.1
ROA *(A/D)	1.4	-0.6	-0.4	1.1	2.8	0.9
Non Interest Income	11.5	7.6	11.8	11.3	10.4	10.5
Residual	5.3	7.8	7.3	8.2	8.2	7.3
ROA	1.11	-0.48	-0.33	0.91	2.31	0.70
Cash Reserve Ratio	3.6	4.0	3.8	4.2	1.0	2.6

As shown in Table 7, operating cost was a main contributor to the increase in the spread for all building societies, averaging 7.0 per cent. This is in contrast to the other cost items, such as the cash reserve and loan loss charges. The average cash reserve cost associated with the spread was 0.7 percent while loan loss charges were 1.1 per cent. The impact of the cash reserve on the spread has been modest relative to the overriding effect of high operating costs. As was the case for the previous period (1990-95), lower earnings as represented by the ROA helped to contain spreads. For the period 1995-2000, ROA was on average 0.7 per cent despite an increase in the ROA for 2000. However, as was the case for the early 1990's, the expansion in NI helped to contain the increase in the interest spread as the ratio of non-interest income and other income to deposits was

[12] Of note, all remaining socieites attained the minimum cash reserve requirement in 2000. Therefore, the disaggregation of the spread for 2000 would be applicable to all societies.

high and averaged 10.5 percent. The earnings from investments allowed these institutions to contain the increases in their loan rates or alternately offer relatively attractive deposit rates, which may not have been in line with their cost of operations.

As shown in Tables 8 and 9, the average interest rate spread was 5.8 per cent and 6.6 per cent, respectively for "non-compliant" and "compliant" building societies. For the period 1996-97 the interest rate spread for non-compliant institutions was higher than for complaint societies. However, this trend was reversed as the interest spread for non-compliant societies declined to 3.8 per cent by 1999. The deposit and lending rates of these non-compliant societies, as shown in Table 7, was much higher than offered by the compliant building societies. The intense competition faced by non-traditional societies from the dominant "traditional" building societies with their established market share and from other financial institutions would account for these high rates. The low deposit rates offered by the traditional societies, which would be representative of their lower costs of raising funds relative to other societies, translated into greater average interest rate spreads.

Given the high cash reserve requirements faced by these non-compliant societies, the contribution of reserve costs to the interest spread was greater than for compliant societies. For non-compliant societies the cash reserve cost was 2.4 per cent relative to 0.2 per cent for the other building societies. For non-compliant societies the ratio of operating costs to deposits was a more significant component of the structure of the interest rate spread. Coupled with these factors, the declining levels of returns (ROA) and the significance of the ratio of other income to deposits meant that the interest spread of these societies was constrained.

As shown in Table 9, the operating cost to deposit ratio for compliant building societies was also an important factor in determining the spreads. However, in comparison to non-compliant societies the contribution of this cost component to the spread was much lower. This suggests that the compliant societies may have been more efficient in their

control of administrative and other expenses. The compliant societies also exhibited a greater stability in ROA.

Table 8

Decomposition of Spread with Cash Reserve above minimum 1 %

(Non-Compliant Societies)

	1996	1997	1998	1999	AVG
Average Loan Rate	33.9	28.7	20.0	20.8	25.8
Average Deposit Rate	28.3	19.2	15.6	17.0	20.1
Interest Spread	5.6	9.4	4.3	3.8	5.8
Cash Reserves	2.5	3.2	2.0	1.8	2.4
Operating Costs	10.6	7.0	43.1	2.3	15.8
Provisions for loan loss	0.4	0.7	2.9	0.6	1.2
ROA *(A/D)	1.6	4.4	-12.1	5.3	-0.2
Non Interest and Other Income	27.0	20.1	40.9	17.4	26.3
Residual	17.5	14.2	9.3	11.1	13.0
ROA	1.0	3.0	-5.0	4.1	0.8
Cash reserve	8.0	11.0	10.0	9.0	9.5

Table 9

Decomposition of Spread with Cash Reserve at minimum 1 %

(Compliant Societies)

	1996	1997	1998	1999	AVG
Average Loan Rate	18.6	20.6	19.2	19.3	19.4
Average Deposit Rate	16.5	11.5	11.1	12.2	12.8
Interest Spread	2.1	9.1	8.2	7.1	6.6
Cash Reserves	0.3	0.2	0.2	0.2	0.2
Operating Costs	5.7	6.2	5.0	7.2	6.0
Provisions for loan loss	0.03	2.3	0.9	1.3	1.1
ROA *(A/D)	1.5	-1.8	1.6	0.5	0.4
Non Interest and Other Income	8.6	4.6	6.8	10.4	7.6
Residual	3.2	6.8	7.3	8.3	6.4
ROA	1.3	-1.6	1.5	0.4	0.4
Cash Reserve	1.0	1.0	1.0	1.0	1.0

However, the ratio of other income to deposits was the most significant component of the interest spread and as was the case for non-compliant societies helped to lower the spread. However, the contribution of investments and other income to the spread for compliant societies was much less than for non-compliant firms.

In summary, it is evident that the cost of operations for the system as a whole, as well as, for the segmented group of societies has contributed significantly to the determination of the interest spread. The effect of the cash reserve is limited except in the case of societies that face higher reserve requirements as a result of their inability to meet the ratio of loans to prescribed liabilities. Most importantly, for all building societies the high levels of other income to deposits would have helped to constrain the increases in the spread and compensate for the expansionary effect that large operating costs had on the interest spread.

5.0 Summary and Outlook

Building societies play an important role in the Jamaican economic structure as providers of housing solutions and as contributors to growth in gross capital formation. Over the period of the 1990's, building societies were affected by developments and changes in the macroeconomic and regulatory environment in which they operated. For example, while financial liberalisation resulted in financial deepening and widened the scope for growth, high inflation and instability in the exchange rate increased market risks and distorted the allocative decisions of these firms. However, the strengthening of the regulatory framework improved the capital adequacy of building societies thereby allowing them to better withstand any adverse shocks. Further, many smaller societies were unable to meet the strict requirements for operations which translated into a consolidation of the industry.

Building societies may have minimal control over developments in the macroeconomic and regulatory environment, however, efficient internal management and decision-making can allow societies to be more competitive and resilient in the face of external shocks. The analysis of the operations of these societies has shown that the greatest barrier to increased efficiency and profitability has been the high costs of operations. Financial ratio analysis revealed that while these institutions faced lower earnings from loans, their cost of administration and of funding assets increased over the review period. This decline in operating efficiency negatively affected the earnings capacity of building societies. The profitability and efficiency ratios of building societies also suggested that large building societies have significant cost advantages relative to smaller societies due primarily to economies of scale and established share of the mortgage market.

An examination of the interest margin of societies also showed that the primary business of building societies was not sufficient to meet the costs of mobilising savings funds in the 1990's. The income earned from loan activities of building societies has been affected by economic slowdown, which has resulted in low effective demand for mortgage loans. The high cost of mortgage repayments relative to the average wage earned has also adversely affected loan demand. Within the context of the declining profitability of their core business, these institutions supplemented their income through investments in Government securities.

A decomposition of the interest rate spread also supported the findings of the financial analysis and the interest margin. Importantly, it was found that the increase in non-interest and other income was the most significant determinant of the spread and helped to contain any large widening of the spread. This lends credence to the claim that income from investments in high yielding, risk free Government securities has helped building societies to maintain their profit margins.

Further, the interest rate spread as an indicator of the structure of bank costs showed that the second largest contributor to high interest rate margins was large operating costs. This supports the previous findings that building societies have been generally inefficient in

controlling their costs of operations. The cash reserve requirement was found to be insignificant as a component of banking costs for building societies as a whole. For non-compliant societies, the cash reserve requirement had a greater weight in the decomposition of the interest spread relative to complaint societies. The other cost components of the spread such as loan loss reserves were also found to be insignificant relative to the share of operating costs.

The challenges faced by building societies, which are highlighted in this paper may require internal reorganisation and the application of available technology in order to improve service delivery and lower the costs of operations. The moderation in inflation and relative stability in the foreign exchange rate has provided a more stable macroeconomic environment for building societies and has decreased many of the risks associated with operations. Further, the maintenance of low inflation may translate into a moderation in wage demands and a reduction of administrative expenses.

However, in the environment of lower spreads or pressure on spreads to decline as a result of falling domestic interest rates, there is greater need for operational efficiency. Large reductions in the branch network or the number of staff may not be viable alternatives for building societies seeking to significantly lower operating costs. The strength of the branch networks has allowed many building societies to maintain their share of domestic savings by providing convenient access points to customers. Therefore, building societies must go further in order to attain productivity and efficiency gains. Business process reengineering with the main objective of reviewing the organisational structure and procedures to ensure greater customer service and efficiency must be a key component of the strategy of building societies. Further, the use of technology such as ATMs and point of sale (POS) facilities can aid in reducing operating costs and allow societies to be more competitive. Technology must also be used to centralise building society operations to eliminate or reduce tedious administrative processes i.e. to reduce the size of the "back office". This may allow resources to be reallocated to the provision of better customer service, developing innovative products, as well as, improved marketing efforts.

In examining how to face the present challenges one must acknowledge that many of the prospects of building societies are tied in with the need to achieve economic growth. Economic growth by improving employment prospects and real income levels can aid in promoting greater levels of savings, as well as, boost the effective demand for mortgage loans. In addition, Government may have a more direct role to play in helping to provide housing solutions and helping to enhance the prospects of the building society industry. The role of Government in the process of providing housing solutions must be that of an "enabler" or facilitator. Implicit in this role is the provision and organisation of infrastructure through the provision of roads, light and water. Further, Government can promote the orderly assembly of land for projects and re-examine the rigidities in its bureaucratic structure that increase the costs of construction. A streamlining of the process of land valuation and certification and implementing realistic building codes and zoning may help to reduce bureaucratic impediments.

An interventionist stance by Government may also help in promoting public/private sector partnership and provide greater housing solutions, thereby aiding the building societies. The aggressive implementation of Government's proposed Joint Venture Policy (JV) may help to make land available at low cost for development. The JV project aims to promote a partnership between Government and the private sector, which involves the provision of housing solutions on lands owned by Government but with financing from the private sector. Schemes such as these may allow for the revival of joint ventures efforts between the private developers and building societies. This may include the provision of a line of credit to developers for project funds by building societies and the subsequent marketing of sub-projects to their savers. The generation of greater effective demand for loans is essential for the viability of building societies and allows for the diversification of operations away from investment activities towards the creation of real assets. This gains added importance given the reduction in interest rates on securities and the efforts of Government to reduce its reliance on domestic debt financing, which may result in a reduction in the interest income of building societies.

In conclusion, many issues for further research are raised by this examination of the performance and operations of building societies. Firstly, is there room for a relaxation of the regulations imposed on societies regarding the maintenance of residential mortgage loan ratios given the low effective demand? Or rather, should there be a broadening of the mandate of these institutions subject to the general principle that building societies continue primarily in their traditional roles? This may mean allowing reforms similar to those enacted in the United Kingdom in the 1986, which allowed building societies to offer a wider range of services. Finally, the issue of the generation of greater effective demand for mortgages by building societies may require additional research efforts.

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APPENDIX

Data Sources:

Building Societies Association of Jamaica (BSAJ) Annual Fact Book (1990-96)

Bank of Jamaica Statistical Digest

Federal Deposit Insurance Corporation (FDIC). **www.fdic.gov**

Bank of Jamaica Annual Report

Table A

Key Economic Indicators

	T-Bill Rate	Exchange Rate*	Inflation**	GDP Growth
1990	29.7	8.17	22.0	5.5
1991	36.6	20.91	51.1	0.7
1992	23.9	22.20	77.3	1.9
1993	39.6	32.70	22.1	2.0
1994	26.7	33.37	35.1	0.9
1995	35.0	39.80	19.9	1.0
1996	25.2	35.03	26.4	-1.3
1997	24.6	36.59	9.7	-1.8
1998	21.1	37.16	8.6	-0.4
1999	18.7	41.42	6.0	-0.4
2000	20.2	45.53	8.2	0.8

Source: Statistical Institute of Jamaica and Planning Institute of Jamaica

* US$1.00=JA$

**Annual Average

Table B

Assets and Liabilities of Building Societies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
ASSETS											
Loans	1,595	2,106	2,884	3,779	7,066	9,539	14,811	15,811	15,001	14,072	14,430
Cash and Liquid Investments	1,261	1,675	3,880	6,422	12,176	10,231	9,533	10,571	16,966	12,063	12,017
Fixed Assets	94	157	479	303	443	715	1,019	1,211	1,230	1,188	1,235
Other Assets	19	438	1,494	3,302	6,567	8,672	7,628	10,127	11,118	12,516	15,441
Total	2,968	4,376	8,738	13,807	26,252	29,156	32,992	37,720	44,315	39,839	43,122
LIABILITIES											
Total Savings Funds	2,669	3,732	7,531	12,228	23,471	25,491	26,029	30,937	34,546	32,577	35,196
Deposits	84	247	124	4,331	7,307	1,846	4,765	4,088	5,402	646	534
Shares-Net	2,586	3,619	7,407	7,897	16,164	23,646	21,263	26,850	29,143	31,931	34,663
Other Liabilities	33	72	136	334	1,208	1,187	4,220	4,448	7,497	2,992	2,890
Total Reserves	266	572	1,071	1,245	1,574	2,477	2,743	2,334	2,272	4,270	5,036
Total	2,968	4,376	8,738	13,807	26,252	29,156	32,992	37,720	44,315	39,839	43,122

Table C

Value of Mortgages Advanced by Institutions

J$ million

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
National Housing Trust	231.3	238.1	366.8	517.2	998.4	2,147.6	3,646.0	2,757.7	4,177.5	4,901.7	4,501.0
Insurance	62.3		271.8	266.2	244.7	82.5	96.3	27.3	73.7	43.3	8.0
Credit Unions	11.0	4.2	5.6	5.3	9.5	5.9	5.5	11.4	28.7	33.2	15.7
Building Societies	556.5	741.1	906.3	1,225.4	3,525.4	4,318.4	3,957.8	2,991.0	1,598.4	1,767.5	2,319.8
Caribbean Housing Finance	n/a	n/a	n/a	n/a	1,053	811.0	648.0	32	-	237.5	37.1
Total	861.1	983.4	1,540.5	2,034.1	5,831.0	7,365.4	8,353.6	5,790.6	5,878.3	6,983.2	6,881.6