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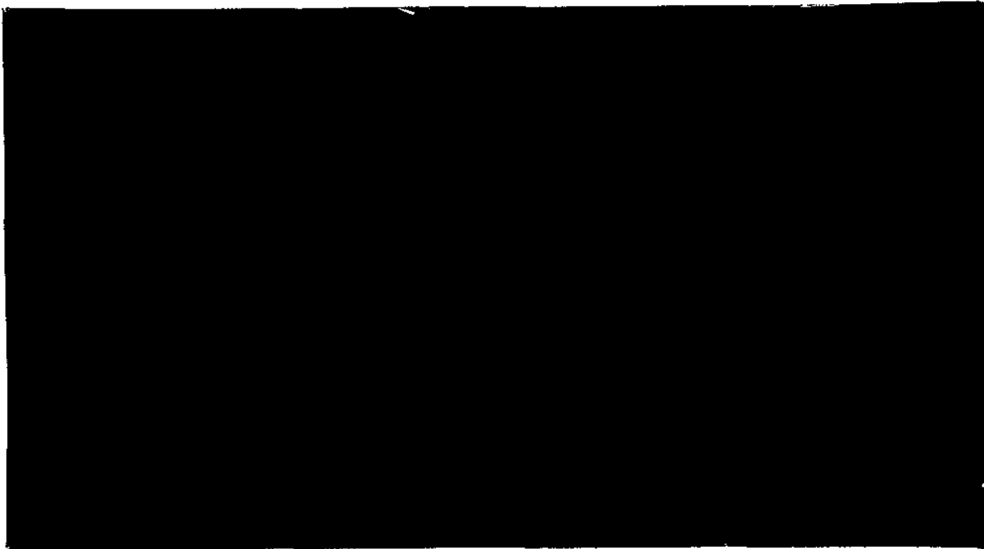

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DEVELOPMENTS IN THE LIFE INSURANCE INDUSTRY IN JAMAICA 1990-1998: CONSEQUENCES FOR MONETARY POLICY

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The views expressed in this paper are those of the author and not necessarily those of the Bank of Jamaica.

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1. INTRODUCTION & MOTIVATION

The Jamaican financial system was liberalized during the mid 1980s – 1990. This liberalization facilitated a rapid expansion of all industries operating in the system. Specifically, between 1990 – 1998, the average annual growth rate of the Life Insurance Industry grew by 133.7 percent while other dominant institutions notably commercial banks and building societies grew by 81.0 per cent and 144.3 per cent respectively.

The liberalized environment brought new challenges for all regulators of financial services. For the Central Bank, the primary challenge related to delivering the objectives of low inflation and ensuring a sound and viable financial system. These challenges emerged as, within this new environment, risk taking among intermediaries increased, while continuous product innovations, new technology and aggressive competition were used to increase market share. Arising from this aggressive expansion was the formation of financial conglomerates, which meant a closer interrelationship between commercial banks, life insurance companies, building societies, merchant banks and other non-financial entities. At the end of 1996, there were nine financial conglomerates in Jamaica, four of which contained a life insurance company, that in turn was the parent company for the commercial bank in the group.

Within these corporate arrangements, the performance of life insurance companies raised much concern. In particular, the inability of some institutions to meet their obligations led to concerns about possible contagion of the financial system. The consequent effect on other financial entities within the group, particularly affiliated commercial banks, implied an active role for the Central Bank in its capacity as lender of last resort.

Against this background, much attention has been paid to the liquidity problems that emerged in some of the major life insurance companies. The analysis of the liquidity problems that emerged in the mid 1990s identified high inflation as the prime motivator for the mismatch of assets and liabilities in the industry. This eventually led to a liquidity crunch, when the authorities aggressively pursued disinflationary policies. In particular, excessive exposure to real estate investments, resulted in low yields and contributed to cash flow problems. Since then, companies have received unusually high levels of capital injection to support the restructuring process and maintain viability.

This paper discusses the evolution of the problems that emerged in the life insurance industry with a view to identifying the weaknesses that contributed to the problems in the industry. A useful vein of analysis is to decompose the life insurance industry into those institutions that received financial assistance, as against those that did not require assistance. In this regard, we are interested in evaluating the differential impact of the sector's exposure to real estate on profitability, liquidity and solvency.

The paper further explores the monetary policy implications of instability in this segment of the capital market. Focus is also placed on the features of the legislative and supervisory framework that governed the industry, with particular emphasis on the weaknesses that companies were able to exploit.

Section 2 briefly discusses the role of life insurance and some of the major life insurance products. Section 3 discusses the macro economic environment over the period 1990 – 1998 and then describes the nature of the problems that emerged in the life insurance industry and their resolution. Section 4 uses selected international financial indicators with ranges established by FINSAC (see

more details in Appendix 2) to evaluate the performance of the industry. Section 5, discusses some of the implications of the crisis for monetary management. Section 6 details some of the supervisory and legislative deficiencies, while the final section discusses the way forward for the industry.

2. LIFE INSURANCE PRODUCTS

The primary function of a life insurance company is to provide protection against the risk of financial loss. The demand for this service has been influenced by a number of factors, the oldest being the inability of an individual to determine his precise life span. Risk coverage safeguards the dependents of insured persons against financial deprivation in the event that one dies, or provides an income should the insured lose the ability to engage in physical or mental endeavor. In addition, an individual may purchase a life insurance policy, which guarantees him a steady stream of consumption funds during retirement. This type of policy is referred to as an annuity or endowment policy.

Over the years, the concept of life insurance solely as a source of income in one's retirement years and for one's dependents in the event of death has changed. Life insurance policies have increasingly been seen as assets that produce flows of investment income over time. This has been reflected in the rapid growth of investment-sensitive life insurance products. In contrast to the traditional ordinary life products that guarantee a specific cash value, investment-sensitive life insurance products offer a cash value and benefit level to policyholders which fluctuates according to the insurers' investment earnings. With these policies, policyholders accept the risk of sharing the insurers' investment gains and losses.

3. Operating Framework

The macro-economic context in which the life insurance sector, as well as the broader financial sector, operated in the 1990's has been well documented [Stennett, Batchelor, & Foga (1998), Panton (1996), Green (1999)]. In the latter half of the 1980's, the Jamaican Government embarked on a programme of economic reform involving financial and trade liberalization, as well as privatization of a number of state owned entities. This shift towards a market-driven economy occurred without the requisite fiscal and monetary adjustments that would ensure macro-economic stability. Within this context, the liberalization of the exchange rate mechanism in 1990 led to rapid increases in inflation, accommodated by high growth in money supply (see Appendix 1, table 1).

In the context of the high inflation, coupled with a relatively inadequate regulatory and supervisory structure and a more competitive financial environment, life insurance companies diversified away from long term policies into equity linked and interest sensitive deposit type policies. These new products were largely short term in nature and were projected to yield rates of return similar to, or higher than those offered by commercial banks or other non-bank financial intermediaries. The new policies introduced by the companies gained popularity with investors particularly because income earned from these financial assets was not subject to withholding tax.

These short-term funds were channelled into long term assets, particularly real estate and stocks, towards maximizing nominal returns from the high inflationary environment. As a result, the share of resources invested by the sector in real estate holdings increased consistently from 23.2 per cent in 1992 to 42.2 percent in 1997 (see Appendix 1, table 2).

The pattern of growth in investment in stocks was not as consistent as the growth in real

estate investments. Between 1990 and 1992, the ratio of equity investments to total invested assets increased from 15.7 per cent to 39.9 per cent. However, with the tightening of monetary and fiscal policies to dampen inflationary pressures in 1993, the relative yield on assets changed and investors' shifted their preference from speculation in the real estate and equities markets towards more government bonds. This led to a fall out in the stock market in 1993, and occasioned a decline in the ratio of equity investments to total invested assets to 8.7 percent by 1997.

Given concerns about the continued depreciation of the exchange rate and spiraling inflation, the Central Bank reintroduced the non-cash portion of the liquid asset requirement, which had been gradually reduced since the mid-1980s. The Bank of Jamaica also increased the penal rate imposed on commercial banks in respect of breaches of the cash reserve and liquid asset ratios from 1/6 of 1.0 percent per day to ¼ of 1.0 percent per day. Additionally, the Central Bank became more aggressive in its open market operations, leading to significant hikes in the signal rate. Fiscal policy was also supportive of the monetary policy stance with public sector borrowing being contained to 3.2 percent of GDP in FY 1993/94.

The authorities' objective of attaining a deceleration in the rate of overall price increases was gradually achieved over the period. From the twelve months inflation rate of 80.2 percent in 1991, the inflation rate was lowered to 25.5 percent by 1995 and at the end of 1998 was 7.9 percent. The exchange rate while showing significant depreciation between 1991 and 1995, remained relatively stable between 1995 and 1998, albeit with sporadic periods of appreciation or depreciation.

With renewed emphasis on macro-economic stability there was a precipitous decline in the

Jamaican stock market index to 13,099.7 points at the end of 1993 from a historical high of 32, 421.7 points at the beginning of the year.

In the context of the substantial decline in the stock market, the life insurance companies' equity portfolio shrunk while claims on the companies by policyholders mushroomed to a historical high in 1993. During that year, claims as a result of the encashment of equity linked policies, increased to $3.3 billion from $549.8 million in 1992. In addition, resources had to be identified to meet regular disbursements relating to maturities and policy surrenders of ordinary life policies. For the remainder of the period, claims increased at an annual average rate of 5.0 per cent partly due to policyholder's response to the imposition of a withholding tax on equity-linked policies in 1994. Within the context of these_developments, the average annual value of all life policies surrendered increased from $352.0 million for the period 1990 – 1992, to $4.9 billion over the period 1993 – 1996. The heavy demand for cash by policyholders continued in 1997.

The payment of policy benefits was a strain on the companies' budget and this was exacerbated by the need to identify resources to meet operating expenses. Exorbitant operating expenses had accompanied the aggressive marketing strategy adopted by the companies during the period 1990 - 1992. During this period, the cadre of sales representatives in the industry increased from 1,428 to 2,098 almost twice the growth rate recorded during the previous three-years. Within companies that sold the newer products, sales agents received significant commissions up-front, a practice which deferred any returns on life insurance policies to later years. In this regard, commissions to sales agents increased by an annual average rate of 59.9 per cent during the period

1990 - 1995.

The expansion in the number of sales representatives during a period in which high inflation rates were driving up the average private sector wage settlement, led to a ballooning of the companies administrative and managerial expenses. In addition, other operational expenses, particularly the cost incurred in maintaining heavy investments in real estate was a further strain on the budget of many companies.

High operating expenses, the premature encashment and surrender of policies combined with normal maturities of long term saving instruments led to an increase in the companies' cash needs. This was worsened by the low level of cash yields on the long-term real estate and equity investments of the companies. Against this background, the life insurance companies sought alternate financing from their banking affiliates. The inability of the life insurance companies to honour obligations with these banking entities in turn led to liquidity problems in these institutions. To address this problem, the commercial banks resorted to the Central Bank for financing while the life insurance companies appealed to the Jamaican Government for help. In an effort to maintain stability in the financial system, the Government established the Financial Sector Adjustment Company (FINSAC) in January 1997, with the aim of providing financial assistance to weak financial entities. Of significance at the end of 1996, the assets of weak life insurance companies accounted for approximately 78.9 percent of the industry's assets.

By the end of 1998 FINSAC had injected capital in excess of $30.0 billion into the life insurance industry through the purchase of preference and ordinary shares from five companies. The

financial assistance of the restructuring company also included the granting of subordinated loans to the weak entities while the life insurance, health and pension portfolios of three intervened companies were sold. This strategy suppressed the growth in related party lending and contained the affiliated banks' need for liquidity support from the Central Bank.

With respect to the legislative framework, the Life insurance Act (1971) is being revised to address the deficiencies. In addition, the Office of the Superintendent of Life insurance is being upgraded and rationalized with financial assistance from the Inter-American Development Bank.

4. EVALUATION OF PERFORMANCE

As was previously stated, the excessive growth in equity linked policies and the concomitant over-exposure to real estate holdings led to the emergence of liquidity problems in the life insurance industry. To the extent that this problem was only manifested in some companies, a useful approach is to decompose the life insurance industry into intervened and non-intervened companies. In this regard, the objective is to evaluate the differential impact of the sector's exposure to real estate and other long-term assets on profitability, liquidity and solvency. This assessment will employ the use of early warning indicators developed by FINSAC.

4.1 EXPOSURE TO REAL ESTATE

One measure of the sector's capacity to absorb potential financial losses due to the downturn in the real estate market is the ratio of real estate investments to capital and surplus (real estate ratio). The accepted range[1] for this ratio is 0 % - 150 %. The data shows that for the period 1990 – 1998, the real estate ratio for the industry averaged 211.0 per cent, with the highest level of exposure occurring in 1991 with a ratio of 492 per cent (table 1a). In terms of the trend in the ratio, the decline between 1992 and 1995 masks the tremendous increase in the value of real estate holdings over the period (see Appendix 1, table 2). This however occurred in the context of fairly strong growth in capital and surplus, largely driven by expansions in undistributed profits. The precipitous collapse after 1996 was underpinned by a substantial decline in premium income, a revaluation of assets to reflect market prices and high operating expenses, all of which had a negative impact on the profitability of the major companies.

Table 1a
Investment in Real Estate

	All Companies	Intervened Companies	Non-Intervened Companies
1990	382	600	34
1991	492	818	31
1992	346	547	16
1993	232	367	17
1994	298	391	171
1995	300	440	146
1996	-90	-57	129
1997	-35	-25	63
1998	-30	-21	54
FINSAC Benchmark: 0 to 150			

Disaggregating the performance ratio for the industry into the intervened and non-intervened institutions indicated wide disparity. For the intervened companies, the ratio of real estate investments to capital and surplus averaged 527.0 per cent between 1990 – 1995 compared with an average of 69.0 per cent for the non-intervened institutions. After 1995, the ratio declined to an average of minus 34.0 per cent for intervened companies but increased to 82.0 per cent for the non-intervened institutions.

For the intervened institutions, this ratio increased from 600.0 per cent in 1990 to an all time high of 818 percent in 1991. After 1991, the ratio declined almost constantly to minus 21.0 percent in 1998. It is important to note that the trend decline in the ratio pertaining to the intervened institutions was largely responsible for the out-turn of the entire industry.

For the non–intervened group, the ratio trended down between 1990 and 1993 from 34 per cent to 17 per cent, before rising sharply to 171 percent in 1994[2.] The ratio thereafter declined steadily to 54 per cent in 1998. The performance of the non-intervened institutions reflected the fact that relative to the intervened institutions, these entities were more conservative in their investment strategy especially as it related to the real estate market. As a consequence, the impact of the down-turn in the real estate market was less severe on the capital and surplus of these entities.

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1 Specified by FINSAC.
2. This movement was largely influenced by the establishment of a medium size company in 1994.

4.2 Liquidity

Heavy investment in real estate reduced the liquidity of the companies' asset portfolio. A measure of the sector's liquidity position is the ratio of liquid assets to liabilities which has a recommended floor of 60.0 %. The rationale for this benchmark, is that, the liabilities of life insurance companies are largely contingent liabilities, requiring assets to be fairly liquid at all times.

Table 1b
Liquid Assets: Total Liabilities

	All Companies	Intervened Companies	Non-Intervened Companies
1990	17	18	13
1991	19	19	21
1992	17	17	19
1993	9	8	14
1994	13	12	20
1995	14	12	25
1996	9	6	28
1997	10	7	33
1998	12	9	38
FINSAC Benchmark: > 60.0			

For the industry, the ratio of liquid assets to liabilities declined from an average of 15.0 per cent during the period 1990-1995 to 10.0 per cent between 1996 – 1998. In both periods the outturn was much lower than the benchmark of 60.0 per cent.

As would be suggested by the relative exposure to real estate, the liquidity situation was significantly different in the two sets of institutions. For intervened institutions, the ratio of liquid assets to liabilities declined from an average of 14.0 per cent during the period 1990-995 to 8 .0 per cent between 1996 and 1998 (see table 1b). This resulted from a notable growth in the companies' use of debt financing consequent on the rise in claims and high operating expenses.

The non-intervened companies had more liquid portfolios with which to support their liabilities. In this regard, the ratio of liquid assets to liabilities for these companies increased from an average of 17.0 percent during 1990 – 1995 to 31.0 per cent between 1995 – 1998, albeit still below the recommended floor (see Table 1b). The higher liquidity ratio displayed by these institutions was the result of a more conservative investment strategy in the real estate market. In addition non-intervened companies were less leveraged than intervened banks.

4.3 Return on Investment

The standard summary measure of return on investment (ROI) is the ratio of net investment income to average investment, which in the case of Jamaican insurance companies has a FINSAC recommended floor of 13.0 per cent. This ratio measures how efficiently a company uses its investment portfolio.

Table 1c
Return on Investment

	All Companies	Intervened Companies	Non-Intervened Companies
1990	N/A	N/A	N/A
1991	7	5	9
1992	11	11	9
1993	4	3	11
1994	17	18	14
1995	5	5	12
1996	15	17	15
1997	5	4	13
1998	5	2	14
FINSAC Benchmark: >13			

For the industry, the ratio of net investment income to average investment was 9.0 per cent for 1990 – 1998. With respect to intervened companies, the ratio averaged 8.0 percent while for the non – intervened companies, the ROI averaged 12.0 per cent. In terms of the trend in the ROI, this measure for the intervened institutions was noticeably unstable, compared with a pattern of fairly steady growth in the same measure for the non-intervened entities. Indications are that the volatility in the ROI for the intervened institutions was reflective of the performance of two large life insurance companies over the period.

The performance of the ROI for the intervened institutions was underpinned by the significant capital gains and substantial cash income generated from the real estate and equity portfolios of the companies, during the high inflationary period of the early 1990s. However, in subsequent years with the containment of inflation and the change in relative prices, the cash yield on the companies' investment portfolio recorded significant declines.

4.4 Profitability

A decline in the rate of return on investment, unusually high volume of claims, highly leveraged operations and exorbitant administrative expenses all served to undermine the profitability of the industry. One indicator of the industry's ability to earn profits on its life insurance and investment operations is the earnings ratio, which is computed by taking net income after unusual or extraordinary items as a proportion of capital and surplus. The FINSAC recommended standard for this measure is 0.0 per cent – 50.0 per cent. The use of capital and surplus in this measure

highlights the importance of capital and surplus as a safety cushion to finance growth and meet regulatory demands and commitments in general.

Table 1d

Earnings Ratio

	All Companies	Intervened Companies	Non-Intervened Companies
1990	38	115	46
1991	42	81	98
1992	38	67	36
1993	22	105	14
1994	26	127	19
1995	9	120	10
1996	-127	-84	28
1997	-62	-62	14
1998	-14	-21	14
FINSAC Benchmark: 0 to 50			

The data in Table 1d shows that during 1990 – 1994, the industry enjoyed strong profits, with the earnings ratio, averaging 33.0 per cent. However, the fortunes of the industry turned during the period 1995 – 1998. In 1995, the earnings ratio declined to 9.0 percent, occasioned by a significant reduction in investment income. In the subsequent period (1996 – 1998) the industry's revenue continued to decline, resulting in a further reduction in the earnings ratio to an average of minus 68.0 per cent. Concurrently, there was an increase in expenses induced by high operating costs and claims. In this context, the industry incurred losses that had an adverse impact on capital and surplus.

The decline in profitability for the industry between 1996 and 1998 was indicative of the performance of both intervened and non – intervened entities. In this regard, whilst the earnings ratio for the non-intervened entities averaged 37.0 per cent during first six years of the 1990s, it declined

to 19.0 per cent between 1996 and 1998. For the intervened companies, the earnings ratio averaged 103.0 per cent during the early 1990s and declined to 55.0 per cent between 1996 and 1998.

The less than buoyant performance evidenced in the non-intervened companies was partly due to the downturn in the economy. More specifically, increased redundancies would have made it difficult for policyholders to service their policies. In addition, the loss of confidence in insurance products in general, also affected sound non-intervened companies. As a result, while the number of policies surrendered grew there was a reduction in the number of new policies written by the companies.

4.5 Solvency

The losses incurred by the intervened companies since 1996 severely eroded the capital base of the institutions. As a result, these institutions became insolvent as evidenced by the ratio of capital and surplus to liabilities. This ratio, which measures the capacity of the companies to absorb adverse operating results, declined from an average of 4.0 per cent between 1990 and 1995, to an average of minus 42.0 per cent during the period 1996 – 1998. The out-turn for 1996 – 1998 was below the recommended floor of 4.5 per cent, reflecting the high level of insolvency in the industry.

Table 1e
Solvency Ratio

	All Companies	Intervened Companies	Non-Intervened Companies
1990	7	5	18
1991	5	3	14
1992	4	3	14
1993	7	5	21
1994	8	6	20
1995	8	5	23
1996	-20	-27	27
1997	-42	-53	44
1998	-38	-47	49
FINSAC Benchmark: > 4.5			

With regard to the non-intervened companies, the relatively strong profit positions bolstered the solvency position of the companies. Consequently, the solvency ratio for the entities increased to an average of 40.0 per cent in 1996 – 1998 from an average of 18.0 per cent during the period 1990 – 1995.

5. Monetary Management

The inability of the intervened companies to generate timely cash flow to honour obligations led to default on loan repayments to affiliated commercial banks. This had a negative impact on the banks' liquidity, earnings and hence profitability. Consequently, there was a run on at least two commercial banks that were perceived to be insolvent. The significant withdrawal of deposits from these institutions threatened to disrupt the efficient functioning of the financial system.

With the manifestation of the weaknesses in the financial sector that threatened the viability

of some commercial banks, the Bank of Jamaica as lender of last resort provided liquidity support to weak commercial banks. This assistance was inclusive of two banks, which up to 1997 were affiliates of life insurance companies. At the end of March 1997, the Central Bank's liquidity support to weak commercial banks amounted to $11.8 billion, while credit from these institutions to their life insurance affiliates amounted to $4.1 billion.

The extension of credit to life insurance companies, a shift in peoples' investment portfolio from non-bank instruments toward more liquid short- term bank deposits and a flight to quality by depositors created a challenge for monetary policy. The Central Bank while providing liquidity support to weak institutions grappled with increased open market operations as it absorbed the excess liquidity from the sound institutions that benefited from depositors flight to quality. Of significance money supply (M3) grew by $12.2 billion or 18.3 per cent between September 1996 and March 1997, relative to a growth of 5.5 per cent during the corresponding period of fiscal year 1995/ 96. This expansion in money supply increased demand pressures in the foreign exchange market, which threatened stability in the exchange rate.

As a result the Central Bank's intensification of open market activities the stock of Reverse Repurchase Agreements increased to $20.0 billion at the end of March 1997 from $16.2 billion in September 1996. The tightening of monetary policy was successful in lowering inflationary expectations. However, this was achieved at increased operational cost to the Central Bank.

In March 1997, FINSAC provided the Central Bank with securities amounting to $11.2 billion in settlement of the liquidity support that the Bank of Jamaica had extended to financial institutions. Securities received from FINSAC at the time of the exchange, accounted for approximately 29 percent of the Bank's stock of local securities. Since then, with compounded

capitalization of interest and the acquisition of additional securities for overdraft incurred by a commercial bank, the stock of FINSAC securities increased to $19.4 billion at the end of December 1998. Consequently, the ratio of FINSAC securities to BOJ's total stock of local securities grew to 36.3 percent. The Bank has been constrained in the amount of cash profit that it generates because of the non-receipt of interest income on these FINSAC securities.

6. Supervisory, Legislative & Regulatory Issues

Deficiencies in both the regulatory and supervisory framework that govern life insurance companies in Jamaica have been cited as providing the basis for the imprudent management of companies and the consequent liquidity crisis that emerged.

All life insurance companies operating in Jamaica are supervised and regulated by the Office of the Superintendent of Insurance and are governed by the Life Insurance Act, 1971 and the Life Insurance Regulations, 1972. However, these statutes are dated and do not provide adequate regulation for an industry operating in a liberalized financial environment. There are several deficiencies in the legislation, however the weakest provisions are those which address the issues of capital adequacy, investment and powers of the supervisor.

6.1 Capital Adequacy

Minimum Initial Capital Requirements: The Life insurance Act (1971) stipulates a minimum capitalization of $100,000.00 for companies that wish to carry on life insurance business in Jamaica. This provision was grossly inadequate in light of the significant growth in the industry in subsequent

years. To address this deficiency, the Superintendent of Insurance through discretionary powers and in consultation with actuaries increased the minimum start-up capital requirement to $100.00 million (US$2.8 million) in 1997. However by then, a number of companies had already become insolvent.

In contrast to what obtains in Jamaica, life insurance companies that are governed by the Life Insurance Act (1980) in Trinidad & Tobago, and wish to operate ordinary long term business are required to have a paid-up share capital of not less than T&T$3.0 million (US$1.25 million). Similarly, the Barbados Life Insurance Act (1996) stipulates a minimum capital requirement of BD$3.0 million (US$1.5 million).

Minimum Capital Adequacy Requirement (MCAR): The Life Insurance Act makes no provision for the establishment of a MCAR which would ensure that companies increase their capital base consistent with expansions in their operations. In fact the issue of solvency is inadequately addressed in Section 34, (d) of the Act which stipulates that if it appears to the Superintendent that a company is becoming insolvent, the company would be required to set aside unencumbered assets valued at $100,000.003 or a specified amount of its domestic liabilities, which is to be determined by the Superintendent of Insurance. The looseness of this provision and the tardiness of life insurance companies in submitting financial returns to the Superintendent of Insurance made it possible for the companies to expand their liabilities without holding capital and reserves sufficient to support the risks that would arise in their businesses.

A comparison of the Jamaican statute with that of other jurisdictions revealed that the Life Insurance Acts in Barbados and Trinidad & Tobago are also devoid of strong risk based capital

requirements. This situation also existed in Canada, until the mid 1990s when steps were taken to address the deficiency of minimum capital requirement for life insurers. Unofficially, the supervisors expected all life insurers to have a capital base at least equal to 5% of liabilities, with the liabilities being established in accordance with conservative actuarial principles. More recently, the Canadians have moved towards the stipulation of a risk based capital requirement.

6.2 Investments

Section 24 (4) of the Life Insurance Act stipulates *inter alia*, that life insurance companies operating in Jamaica should have no less than 70 per cent of the domestic liabilities invested in Jamaica. While the statute specifies the assets permissible for investment by the companies, there are no limitations on the prescribed assets. The omission of such a requirement from the Life Insurance Act gave companies the opportunity to concentrate their assets into real estate and affiliated companies despite significant growth in their short-term liabilities.

Other country experiences are at variance with this omission. In Trinidad and Tobago, companies are mandated to invest at least 80 percent of the liabilities in their statutory fund in that jurisdiction and their life insurance statute specifies the securities permissible for investment by the companies as well as the mix.

Similarly the Barbados Life Insurance Act both stipulates the permissible securities for investment as well as imposes limitations on investments in recommended securities and assets. The Act prohibits a life insurance company from (a) investing more than 25 percent of the accepted value of its total assets in Barbados in ordinary shares; (b) investing more than 15 percent of the value of

3 *Equivalent to US$2,810.6 in 1997.*

its total assets in Barbados in real estate or leaseholds for the production of income or; (c) investing in bonds, debentures or other evidences of indebtedness on which payment of principal or interest is in default.

In the United States and Canada detailed rules with regard to the investment of company assets have been replaced by an approach that places the onus on the Board of Directors for investing the company's funds in a prudent manner. Even in these jurisdictions, however, certain broad investment limitations are retained for certain categories of investments that are seen as posing higher than average risk, for example real estate and common stocks. Importantly, related party investments have been largely prohibited in Canada and for those that are not prohibited, a special committee of the Board of Directors must satisfy itself that the transaction is in the interest of the institution and that it is taking place at normal market rates.

6.3 Powers of the Supervisor

The provisions relating to the powers of the Superintendent of Life Insurance in the Jamaican Act are also inadequate. Although the Act in Section 47 gives the Superintendent the power to require an insurer to provide information relating to the business of the company, the statute is silent on interim penalties for non- compliance. In this regard, the Superintendent cannot penalize companies that do not submit these returns when they fall due.

Another shortcoming of the legislative framework is that the Superintendent does not possess operational independence. In fact, Provision 49 of the Act stipulates that in the event that the Supervisor wishes to acquire pertinent information that was not provided by the insurer, the

Supervisor must seek the intervention of a Justice of the Peace (JP). The JP would intervene by issuing a warrant to a constable permitting a search of the insurer's place of business.

Yet another deficiency relates to the absence of a provision that empowers the Supervisor to give directives to an insurer, or take control of the insurer if this is necessary to address financial or operational problems. In Trinidad, the Life Insurance Act grants the insurance supervisor the power to appoint an actuary to investigate the financial position of the company if it appears that the company has failed to comply with the requirements of the Act, and it is necessary to protect policy holders. The Supervisor also has the power to stipulate that a company refrains from making investments of a specified class or description, as well as mandate that the company prepares and submits financial statements with greater frequency.

Coupled with the weak legislative framework within which life insurance companies continued to operate in Jamaica was the inadequate supervision provided by the Office of the Superintendent of Insurance. This supervisory body is mandated to monitor the operations of the industry, so as to ensure that the companies remain solvent, viable and that their operations are within the ambit of the Life Insurance Act and Regulations. However, the Superintendent of Insurance does not have at his disposal adequate supervisory measures to bring about timely corrective action when there are regulatory violations, or where policyholders are threatened in anyway. These deficiencies in both the regulatory and supervisory framework allowed for the imprudent management of companies and the consequent liquidity crisis that emerged.

7. Conclusion and Recommendation

During the early 1990s the Jamaican life insurance industry was characterized by a build up of short term liabilities and the concentration of assets into real estate and related companies. Within the high inflationary environment, the industry recorded significant growth with healthy levels of profitability and solvency. However, with the adoption of stabilization measures to reduce inflation, there was a slow down in the value of the real estate and equities markets that necessitated a revaluation of the companies assets. This revaluation contributed to undermining the profitability of the industry. The major companies were forced to write off substantial losses against capital making the entities insolvent. In response to the liquidity and solvency problems that emerged in the industry, Government provided support to the weak institutions through the restructuring agency FINSAC.

To avoid a recurrence of the problems that surfaced in the industry, there is need for an effective legislative and supervisory framework that can ensure the protection of policy holders and safeguard against future fall out. Reforms must pay attention to key areas that were circumvented. These include the following:

1. Prudential requirements that stipulate portfolio guidelines, detailing limits on clearly defined permissible activities and specifying risk based capital requirements in keeping with international standards.
2. Standards of good governance, which require auditors to adhere to accounting principles that are in keeping with international standards and safeguard against sharp revaluation of assets which can have a deleterious impact on the viability of companies. In addition, these standards should encourage transparency in the companies operations and place more responsibility on

boards of directors and management for ensuring that their institutions are operated in accordance with standards of sound business and financial practice.

3. A supervisory framework that fosters efficiency, ensures the necessary funding for the Supervisory Authority and promotes consolidated supervision as a means of eliminating regulatory arbitrage. The framework should stipulate adequate supervisory measures to bring about timely corrective action when insurers fail to meet prudential requirements (for example Cease and Desist Orders and Directions), when there are regulatory violations, and where concerns as to safety and soundness exist. The Supervisory Authority must also have the power to establish criteria for reviewing major acquisitions or investments by a life insurance company and ensuring that corporate affiliations or structures do not expose the insurer to undue risk. Further, the Supervisory Authority should be required to conduct an examination of every insurer at least once every year but have regular contact with the insurer's management and a thorough understanding of the institution's operations.

Within a proper regulatory framework the Jamaican Life Insurance industry can function efficiently, subject to reasonable prudential standards of supervision. It is envisaged that the supervision of the industry should be greatly enhanced in light of the establishment of the Financial Services Commission, an umbrella organization, mandated to ensure the harmonization of legislation across the financial sector. The pursuit of policies which foster the establishment of an efficient and stable life insurance industry will continue to be critical given the role of the industry in facilitating the accumulation of long term savings. Stability in the industry will undoubtedly provide scope for the Central Bank to reduce its role as lender of last resort and focus on the primary objective of price stability.

APPENDIX 1

Table 1

Selective Economic Indicators

	1991	1992	1993	1994	1995	1996	1997	1998
Growth in GDP	0.9	1.6	1.7	1.1	0.7	(1.3)	(2.0)	(0.5)
Inflation rate (point-to-point)	80.2	40.2	30.1	26.9	25.5	15.8	9.2	7.9
M2 growth rate	54.6	59.3	39.9	36.6	38.5	15.4	12.6	7.3
30 day rates on BOJ instruments	44.7	25.5	46.6	28.2	41.5	27.0	29.0	22.0
Commercial Bank A/W Loan Rate[4]	34.0	46.0	49.6	45.8	48.6	42.2	35.0	33.0
Commercial Bank A/W Deposit Rate[1]	27.5	23.0	39.8	27.9	26.2	20.8	14.1	15.5
Growth rate in Private Sector Credit*	39.4	22.4	68.9	24.3	51.9	25.3	(14.7)	(16.9)
Exchange Rate e.o.p	20.9	22.20	32.70	33.37	39.80	35.03	36.59	37.16
NIR (US$mn.) e.o.p.	(443.0)	(67.4)	51.1	398.6	418.6	694.9	540.0	579.4

Source: Bank of Jamaica & Statistical Institute of Jamaica

* : Values for 1997 and 1998 reflect the purchase of non-performing loans by FINSAC. Without FINSAC's intervention the values would have been 14.7 and 1.3 respectively.

4 Average weighted rates as at the end of the period.

Table 2
Invested Assets Of Life Insurance Companies.
(E.O.P)

	1990	1991	1992	1993	1994	1995	1996	1997	Avg.
				(J$Mn)					
Real Estate	1,241.1	3,541.4	4,011.4	5,388.4	8,006.2	9,218.0	9,497.5	8,756.1	6,207.5
Mortgages	264.8	435.6	442.7	676.3	533.9	599.3	455.0	458.3	483.2
Policy Loans	204.8	220.9	265.5	307.9	344.5	380.6	463.1	483.3	333.8
Common Stock(1)	499.6	1,353.4	6,874.0	2,366.0	2,759.4	2,645.1	9,005.8	1,796.4	3,412.5
Govt. Sec.	319.1	326.9	453.3	551.1	710.1	842.4	1,437.7	3,914.1	1,069.3
Deposits	251.7	216.0	1,222.2	1,088.9	1,666.9	2,344.9	2,285.8	2,274.5	1,418.9
Debentures	95.9	120.2	189.6	273.7	57.2	403.6	532.7	349.7	252.8
Affiliates	305.1	204.3	3,759.2	8,304.8	8,606.9	10,321.2	5,139.8	2,728.8	4,921.3
Total	3,182.1	6,418.7	17,217.9	18,957.1	22,685.1	26,755.1	28,817.4	20,761.2	18,099.3
	1990	1991	1992	1993	1994	1995	1996	1997	Avg.
				Growth Rate (%)					
Real Estate	-	185.3	13.3	34.3	48.6	15.1	3.0	-7.8	41.7
Mortgages	-	64.5	1.6	52.8	-21.1	12.2	-24.1	0.7	12.4
Policy Loans	-	7.9	20.2	16.0	11.9	10.5	21.7	4.4	13.2
Common Stock(1)	-	170.9	407.9	-65.6	16.6	-4.1	240.5	-80.1	98.0
Govt. Sec.	-	2.4	38.7	21.6	28.9	18.6	70.7	172.2	50.4
Deposits	-	-14.2	465.8	-10.9	53.1	40.7	-2.5	-0.5	75.9
Debentures	-	25.3	57.7	44.4	-79.1	605.6	32.0	-34.4	93.1
Affiliates	-	-33.0	1,740.0	120.9	3.6	19.9	-50.2	-46.9	250.6
Total	-	101.7	168.2	10.1	19.7	17.9	7.7	-28.0	42.5
	1990	1991	1992	1993	1994	1995	1996	1997	Avg.
				Contribution (%)					
Real Estate	39.0	55.2	23.3	28.4	35.3	34.5	33.0	42.2	36.3
Mortgages	8.3	6.8	2.6	3.6	2.4	2.2	1.6	2.2	3.7
Policy Loans	6.4	3.4	1.5	1.6	1.5	1.4	1.6	2.3	2.5
Common Stock	15.7	21.1	39.9	12.5	12.2	9.9	31.3	8.7	18.9
Govt. Sec.	10.0	5.1	2.6	2.9	3.1	3.1	5.0	18.9	6.3
Deposits	7.9	3.4	7.1	5.7	7.3	8.8	7.9	11.0	7.4
Debentures	3.0	1.9	1.1	1.4	0.3	1.5	1.8	1.7	1.6
Affiliates	9.6	3.2	21.8	43.8	37.9	38.6	17.8	13.1	23.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 3
Liabilities of Life Insurance Companies
1990 - 1998

	Life insurance & Annuity Reserves	Other Liabilities	Total Liabilities
		J$MN	
1990	1,331	1,706	3,037
1991	2,079	3,664	5,743
1992	4,217	7,444	11,661
1993	6,598	8,859	15,457
1994	9,054	12,454	21,508
1995	10,814	15,842	26,657
1996	12,649	25,966	38,615
1997	10,420	35,243	45,663
1998	9,533	39,634	49,167
		Growth Rate (%)	
1990	-	-	-
1991	56.2	114.8	89.1
1992	102.9	103.1	103.0
1993	56.5	19.0	32.5
1994	37.2	40.6	39.1
1995	19.4	35.2	38.6
1996	17.0	54.2	29.6
1997	-17.6	35.7	18.3
1998	-8.5	12.5	7.7
Avg.	32.9	51.9	44.7
		% Contribution	
1990	43.8	56.2	100.0
1991	36.2	63.8	100.0
1992	36.2	63.8	100.0
1993	42.7	57.3	100.0
1994	42.1	47.9	100.0
1995	39.1	50.9	100.0
1996	32.8	67.2	100.0
1997	22.8	77.2	100.0
1998	19.4	80.6	100.0
Avg.	35.0	65.0	100.0

Source: FINSAC

Note: Other Liabilities are comprised of loans and policyholders' funds

Table 4
Breakdown of Life Insurance Companies Income, 1990 – 1998

Date	Net Premiums Income	Net Investment Income	Other Revenue	Total Revenue
		J$mn		
1990	450.9	188.6	80.6	720.1
1991	722.5	259.1	161.1	1,142.8
1992	2,601.6	854.3	470.2	3,926.2
1993	5,117.8	475.4	722.9	6,316.1
1994	7,928.0	2,791.9	480.3	11,200.2
1995	7,721.5	1,082.2	344.0	9,147.7
1996	5,336.7	3,718.7	197.3	9,252.7
1997	5,100.2	3,220.0	184.9	8,505.1
1998	4,850.0	1,500.0	155.0	6,505.0
		Growth Rate (%)		
1990	-	-	-	-
1991	60.2	37.4	99.9	58.7
1992	260.1	229.7	191.8	243.6
1993	96.7	-44.4	53.7	60.9
1994	54.9	487.3	-33.6	77.3
1995	-2.6	-61.2	-28.4	-18.3
1996	-30.9	243.6	-42.7	1.1
1997	-4.4	-13.4	-6.3	-8.1
1998	4.9	-53.4	16.2	-23.5
		% Contribution		
1990	62.6	26.2	11.2	100.0
1991	63.2	22.7	14.1	100.0
1992	66.3	21.8	12.0	100.0
1993	81.0	7.5	11.4	100.0
1994	70.8	24.9	4.3	100.0
1995	84.4	11.8	3.8	100.0
1996	57.7	40.2	2.1	100.0
1997	60.0	37.9	2.2	100.0
1998	74.6	23.1	2.4	100.0

Source: FINSAC and author's computation

Table 5
The Expenditure of Life Insurance Companies
1990 - 1998

	Interest Expense	Taxes	Other Expenses	Total Expenses
		(J$Mn.)		
1990	5.0	4.7	575.8	585.5
1991	13.9	15.0	937.9	966.8
1992	60.4	32.0	2,911.8	3,004.1
1993	64.0	41.2	4,309.9	4,415.0
1994	126.3	118.2	10,522.8	10,767.3
1995	423.6	55.9	7,724.9	8,204.3
1996	3,579.3	100.4	14,733.4	18,413.1
1997	5231.2	103.0	13,777.0	19,111.2
1998	4,338.1	75.7	8,799.1	13,212.9
		Growth Rate (%)		
1990	-	-	-	-
1991	177.0	220.9	62.9	65.1
1992	335.6	113.3	210.5	210.7
1993	5.9	28.7	48.0	47.0
1994	97.4	187.1	144.2	143.9
1995	235.2	-52.7	-26.6	-23.8
1996	745.0	79.6	90.7	124.4
1997	46.2	2.7	-6.5	3.8
1998	-17.1	-26.6	-36.1	-30.9
		Contribution (%)		
1990	0.9	0.8	98.3	100.0
1991	1.4	1.6	97.0	100.0
1992	2.0	1.1	96.9	100.0
1993	1.4	0.9	97.6	100.0
1994	1.2	1.1	97.7	100.0
1995	5.2	0.7	94.2	100.0
1996	19.4	0.5	80.0	100.0
1997	27.4	0.5	72.1	100.0
1998	32.8	0.6	66.6	100.0

Source: FINSAC

Note: Other Expenses is comprised of claims, administrative costs & commission.

APPENDIX II

Evolution of the Jamaican Life Insurance Industry
1990 - 1998

	1990	1995	1998
No. of Institutions	9	11	10
Names of Institutions	-American Life Insurance Co. -Crown Eagle Life Insurance Co. -Cuna Mutual Insurance Society -Dyoll Life Insurance Co. -First Life Insurance Co. -Island Life Insurance Co. -Jamaica Mutual Life Assurance Society -Life of Jamaica Ltd. -NCB Insurance Services Ltd.	-Caribbean American Life Assurance Co. -Crown Eagle Life Insurance Co. -Cuna Mutual Insurance Society -Dyoll Life Insurance Co. -First Life Insurance Co. -Horizon Life Insurance Co. -Island Life Insurance Co. -Jamaica Mutual Life Assurance Society Life of Jamaica Ltd. NCB Insurance Services Ltd. Prime Life Assurance Co.	-Crown Eagle Life Insurance Co. -Cuna Mutual Insurance Society -Dyoll Life Insurance Co. -First Life Insurance Co. -Island Life Insurance Co. -Jamaica Mutual Life Assur. Life of Jamaica Ltd NCB Insurance Services Ltd. Prime Life Assurance Co. Scotia Jamaica Life Insurance Co. Ltd

Selected Entities within the Jamaican Financial Sector: 1990 - 1998

	1990	1995	1998
Commercial Banks			
No. of institutions	11	11	9
No. of Branches	170	188	160
Merchant Banks			
No. of institutions	21	25	13
Building Societies			
No. of institutions	6	15	8

EARLY WARNING INDICATORS

At the onset of the restructuring programme, FINSAC utilized a number of ratios to evaluate the performance of the companies that had been operating in the life insurance industry during the period 1990 – 1997. These ratios are the result of research into early warning procedures conducted by Office of the Superintendent of Financial Institutions (OSFI) in Canada and the National Association of Life insurance Commissioners (NAIC) in the U.S.A. Whilst the calculation of the ratios is generally homogeneous, the benchmark for each ratio differs slightly across jurisdictions and is constantly reviewed by each regulator.

CALCULATION OF RATIOS

1. Investment in Real Estate

$$= \frac{\text{Investment in Real Estate} \times 100}{\text{Capital and Surplus}}$$

2. Liquidity

$$= \frac{\text{Liquid Assets} \times 100}{\text{Total Liabilities}}$$

3. Return on Investments

$$= \frac{\text{Net Investment Income} \times 100}{\text{Average Assets}}$$

4. Earnings Ratio

$$= \frac{\text{Net Income} \times 100}{\text{Capital \& Surplus}}$$

5. Solvency Ratio

$$= \frac{\text{Capital \& Surplus} \times 100}{\text{Liabilities}}$$

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