




*Taking Responsibility*

# **Investigating Informal Investment Schemes in Jamaica**

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We are committed to the development of the countries of the Caribbean and will hold fast to this commitment through regular presentation of the evidence-based research needed to inform policy. CaPRI sees this study as a vehicle to enlightening the very important discussions surrounding these investment options.

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## **EXECUTIVE SUMMARY**

The proliferation of a number of informal investment schemes in Jamaica has given rise to discussions on the impact of these schemes on the economy. With only limited knowledge of the scope and structure of these organizations, many Jamaicans have eagerly invested in them, with the hope of multiplying their returns through the unusually high interest rates offered by these entities. This paper contributes to the ongoing discussions surrounding the influence of these schemes and the role they play in the lives of local investors and, ultimately, the economy. To address this and related issues, the study will discuss the following:

- the extent to which Jamaicans are likely to have invested in informal investment schemes;
- the purpose for which the investment returns are being used in the economy;
- real-country cases, highlighting the impact of such schemes on the livelihood of households and the economy in general.

The selection of appropriate methodologies is an important part of CaPRI's research programme. This, however, was one of the biggest challenges to this study since, given the opaque nature of the research topic, information was not readily available. Furthermore, the schemes operate informally, financial institutions were often uncooperative and at the time of the survey, the environment grew increasingly tense. In light of these challenges, CaPRI applied multiple methodologies employing statistical and econometric analyses. The first step was to apply an extensive multistage sampling technique which combined elements of snowballing, quota and stratified sampling, to survey over 400 investors in the schemes. The respondents were stratified based on class, gender, age and geographic location. Vector Autoregression (VAR) estimation was used for the impact analysis, using data from April 2006 to September 2007, containing variables such as inflation rates, a proxy for production (production of petroleum products), remittances outflow by the private sector, exchange rates and a proxy for financial institution encashment to a number of informal investment schemes in Jamaica.

### **A. Overall Findings:**

The influence of the informal investment schemes could be spreading throughout the Jamaica economy.

- Extrapolation from the survey indicates that at least 14,000 Jamaicans are likely to be invested in these schemes with the total number probably being in the tens of thousands.
- The vast majority of investors do not expect a bail-out from the government.
- Investor deposits are “facilitated” by the banks, which currently provide loans to over a fifth of investors in the informal investment schemes. However, a large proportion of investors choose to keep returns in the form of savings in the banks.
- Based on the proportion of middle-class investors, most individual investors will be able to absorb the losses should a scheme collapse.
- Evidence suggests that social unrest following a scheme collapse will likely also be short-lived and probably isolated.
- In terms of the impact on the economy, the research shows that in the event of a sudden outflow of funds belonging to the IIS (collapse), the effect will not be long-lasting; hence there should be quick recovery of key macroeconomic indicators following a major collapse of these schemes.

**B. Our Recommendations:**

- The government should not offer any kind of bail-out or rescue package to investors or firms which lose money as a result of a collapse of any informal investment schemes.
- The appropriate policy response to the emergence and proliferation of such schemes is for the regulatory authority to prod them into formalization, as is currently being done.
- It is not within the remit of the banks or other private entities to hasten the collapse of informal investment schemes.

## **I. INTRODUCTION**

Jamaica's financial system has been developing well since its misfortunes in the mid-1990s. Despite this improvement, many financial institutions remain vulnerable to a number of risks emanating from lapses in the country's macroeconomic environment. A common threat to Jamaica's financial stability is associated with the country's large public debt, which relies heavily on the local bond market and carries with it heightened risks in the event of debt default. Lately, considerable attention has been given to the activities of a growing network of collective financial schemes, which have penetrated the financial system. In fact, the entire Caribbean region has become increasingly favourable to investors of private equity funds, hedge funds and other opportunistic ventures.

Though the potential impact of such operations is yet to be fully assessed, past experiences – both within the local economy and in countries which have played host to these schemes -- act as a guide to the likely threat they could pose to the Jamaican economy. This inquiry focuses on high-risk unregulated investment schemes that purport to offer attractive short-term returns on the deposits of Jamaican investors. The main methodology that was applied involved interviews with investors in these schemes to identify the role they play in participants' household finances. These results as well as existing data were evaluated using statistical and econometric analyses. The experiences of other countries were also included in order to determine the sustainability of high-return saving schemes. Discussions were held with a number of key financial institutions that have also conducted their own research.

The key conclusions which flow from our research are the following. There is a high degree of probability that many, if not most of the informal investment schemes operating in Jamaica are unsustainable, making their eventual collapse inevitable. However, should this happen, and when it does happen, our research indicates that any detrimental impact on the economy will be short-lived, and absorbed within a matter of months. Nor do we find strong evidence of looming social unrest should these schemes collapse. Contrary to popular perception, the informal investment schemes appear to be the domain not of poor Jamaicans, but of middle-class investors, who appreciate the risks involved in their exposure, and treat them as high-risk portions of diversified investment portfolio (akin, perhaps, to gambling). There is little to suggest that violent protest will be among their responses to the loss of their investments. The challenge of integrating informal investment schemes into the formal economy – a process which will filter out any investment schemes that are unsustainable such as pyramid schemes – is appropriately the preserve of the regulatory authorities. Both the government and formal financial sector should thus leave the regulatory authorities to do their job, facilitating their work but not trying to supplement or alter it.

## **II. OVERVIEW OF THE FINANCIAL LANDSCAPE OF JAMAICA**

Jamaica is a small, open economy that has operated with a single national currency since its independence in 1962. In the first two decades since independence, the economy had a strongly repressed financial system.<sup>1</sup> This period was characterized by a fixed exchange rate regime, restrained interest rates and high statutory reserve requirement. Through the implementation of the International Monetary Fund's structural adjustment policies, between 1985 and 1992, Jamaica embarked on a number of financial reforms.<sup>2</sup> These reforms led to the deregulation of interest rates, introduced a floating exchange regime and stipulated a move towards open market operations by the central bank.<sup>3</sup>

The period following financial system reforms presented new challenges to the economy and the financial system in particular. The new liberalized financial system stimulated risky and imprudent practices, especially by the non-bank intermediaries which wanted to take advantage of the increased volatility in nominal interest rates. These practices, however, led to increased borrowing, low levels of savings and rising interest rates. This in turn caused great levels of illiquidity in many financial institutions by 1995.<sup>4</sup> Consequently, the entire financial system was affected by this crisis and between 1995 and 1996 the Ministry of Finance had to intervene by providing the liquidity needed.

The government took over the failing financial institutions in its effort to correct the problems being experienced by the sector. Some of these institutions were closed down while the government chose to consolidate some others. There was therefore subsequent strengthening of the financial sector and regulatory system. Regulatory bodies became more stringent and active in the dynamics of the financial sector. There was the formation of the Financial Services Commission which, along with the Bank of Jamaica, functioned in overseeing the activities in the financial sector.

All in all, the picture which has emerged over the last decade is of a financial sector that is healthy and more resilient than that which entered the 1990s crisis. Consolidation has taken place, growth has resumed, and most indicators point to companies which are healthy and relatively well-managed. Equally, the country's regulatory framework was considerably improved in the wake of the financial crisis, further shoring up confidence in the sector. Therefore, the economic and financial environment in which informal investment schemes began proliferating in recent years has been – if vulnerable to exogenous shocks – relatively well-positioned to absorb short-term cyclical shocks.

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<sup>1</sup> Kirkpatrick, Colin and Tennant, David (2002). 'Responding to Financial Crisis: The Case of Jamaica', *World Development* Vol. (30) 11 pp. 1933-1950 and Peart, Kenloy (1995). 'Financial Reform and Financial Sector Development in Jamaica.' *Social and Economic Studies*, 44, pp.1-22.

<sup>2</sup> Witter, Michael and Richard Bernal (1984). *Exchange Rate Policies and the Jamaican Economy*. Department of Economics Occasional Paper Series No. 1.

<sup>3</sup> Bank of Jamaica (1991). *Jamaica's Relationship with the IMF*. Kingston, Jamaica: Bank of Jamaica.

<sup>4</sup> Peart, Kenloy (1995). 'Financial Reform and Financial Sector Development in Jamaica.' *Social and Economic Studies*, 44, pp.1-22.



### **III. UNDERSTANDING INFORMAL INVESTMENT SCHEMES**

Despite numerous attempts to categorize financial activities taking place across the world, a recent *Global Financial Stability Report* (IMF) noted that traditional distinctions between different types of investment funds have begun to blur. This is due to the surfacing of a wider range of investors who have gained access to investment vehicles that combine traditional asset classes and financial instruments, using complex strategies<sup>5</sup>. Though alternative investors have existed for decades,<sup>6</sup> they are now one of the most talked about groups, particularly in relation to the enforcement of effective corporate governance. These new developments pose new challenges for regulators, who have to now learn how to adjust their traditional focus.

Although there has been much speculation about the activities of informal investment schemes, policymakers and other interested parties are yet to find a description which comprehensively captures the essence of these operations.<sup>7</sup> Indeed, it is because of this dilemma that varying terminologies have emerged to identify such operations. Some common terms associated with these schemes are “collective investment schemes,” “multi-level schemes,” “revolving funds,” merry-go-rounds,” “hedge funds,”<sup>8</sup> “unregulated/unregistered schemes” and the most common of all, “Ponzi and pyramid schemes.”

#### **Characteristics of Multi-level, Pyramid and Ponzi Schemes**

Notwithstanding the heterogeneity in the structure of these organizations, they all involve large numbers of small investors who often times are lured into participating in a wide range of investment activities or financial hedging, through the administration of a central unit. Historically, these schemes are often unregulated or partially regulated,<sup>9</sup> possess growing levels of liabilities which exceed their assets and rely heavily on new investment inflows to fund payments to existing investors.<sup>10</sup> Multi-level, pyramid or Ponzi schemes are particularly infamous for paying out unusually high rates of return over a short period of time (to earlier investors), needing a consistently expanding supply of new membership in order to meet obligations to previous investors, requiring a minimum initial deposit, sometimes placing little effort into profit-making ventures or products and lasting for only a few years.<sup>11</sup> It is this last attribute of a pyramid scheme which makes it

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<sup>5</sup> See, IMF (2006).

<sup>6</sup>Multi-level schemes have existed for almost a century, see “Comment: Frank Fitzgibbon: Curse of the pyramids,” *The Sunday Times* (London), (March 19, 2006).

<sup>7</sup> See, Organization for Economic Co-operation and Development (July 2007). “The implications for Alternative Investment Vehicles for Corporate Governance: A Synthesis of Research about Private Equity and Firms and ‘Activist Hedge Funds’,” (France).

<sup>8</sup> *Ibid.*

<sup>9</sup> *Ibid*: see pages 16-18 for a discussion on hedge funds.

<sup>10</sup> See, Jarvis (March 2000) for a discussion on the asset-liability ratio of pyramid schemes. Not yet cited, use note 37.

<sup>11</sup> See Mark Paul, “Ireland: How to tell a square deal from a pyramid scheme,” [Online Article](#) October 1, 2006. Times Online. January 4, 2008.

an unsustainable investment ploy that always fails to meet the expectations of over 90 percent of its investors.<sup>12</sup>

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<http://business.timesonline.co.uk/tol/business/money/article655887.ece>; Rose Snedker (January 2003), "Case Study: Cracking the Mystery of Pyramid Schemes," *Sunday Times*; "Future Looks Bleak for the Unwary," *The Times* (London, October 8, 2005)."

<sup>12</sup> Patrick Honohan, a World Bank financial policy advisor, explains that experiences across the world have shown that these entities do not work. See, Range, Irangika and Anjana Samarasinghe, Online News Article, "Pyramid Schemes Threaten Economic Stability – FitzPatrick," (Lake House: The Associated Newspapers of Ceylon Ltd).

**Box 1: Probability Model of a Pyramid Scheme**

Paramount to the discussions surrounding these schemes are the issues of sustainability and the legitimacy of their claims of consistently offering high returns. Fortunately there are like-minded experts who can demonstrate that the potential gains are misrepresented by promoters and that in reality, a pyramid scheme cannot be sustainable, especially within the context of a finite population.

**Using the probability model developed by Joseph Gastwirth (1977), we can demonstrate that pyramid schemes will at some point in time, fail to repay the investments of the majority of investors:**

Assuming a finite quota of potential investors (which in reality, all schemes face) Gastwirth applied a simple calculation of the probability distribution of the number of people the *k*th person can recruit. From these calculations, we find that once the number of investors reaches approximately a third of the fixed set of investors who can and are willing to invest in these schemes, any future participant can expect to recruit no more than one person. Hence, only a third of investors who joined first can expect to recruit at least one new participant. As illustrated, if 100 persons are in the quota, then once the 31<sup>st</sup> person is

recruited, the probability of recruiting another is negligible - this also goes for a quota of 500 persons.

Using Quota (N)	100	Using Quota (N)	500
Formula	$\ln[(N-1/2)/(k-1/2)]$	Formula	$\ln [(N-1/2)/(k-1/2)]$
Position of Entry (k)	Expected Number of Recruits	Position of Entry (k)	Expected Number of Recruits
1	4.60	5	4.60
5	2.97	15	3.49
10	2.25	25	2.97
15	1.82	30	2.78
20	1.50	50	2.25
25	1.25	75	1.82
30	1.04	90	1.62
<b>31</b>	<b>1.00</b>	130	1.21
35	0.86	150	1.04
40	0.69	<b>155</b>	<b>1.00</b>
45	0.54	160	0.97
50	0.41	165	0.93

**What are the implications to the investors?**

Needless to say, this limiting factor means a low probability for one to recoup one's initial investment. In fact, Gastwirth's calculations are that the majority of investors will have less than a 10 percent chance of getting back their investments in a pyramid scheme that limits the number of investors. He further points out that half the investors will find no one else to recruit and lose all their money and less than 1% of the participants can expect to recruit at least six new investors.<sup>13</sup>

<sup>13</sup> In the case of Jamaica, it appears as if some of the IIS which may actually turn out to be pyramid schemes, actually invest in real assets which might be making returns, thereby marginally reducing the overall number of participants that are expected to lose. Gastwirth's paper is for a strict pyramid scheme, Cash Plus for example would be a hybrid, which is why it has continued for so long compared with other famous pyramid schemes, which were strictly pyramids.

### **Informal Investment Schemes (IIS) in Jamaica**

Jamaica has been host to numerous high yield investment schemes for almost a decade. The earliest documented collapse of such schemes dates as far back as 2001 when the family-run partner plan scheme, *Community Partner Club*<sup>14</sup> ended after only a month in operation. Other informal investment schemes that emerged within this same period were *Revolving Plan* and *Speedy Cash*.<sup>15</sup> By early 2004 several other scheme operators were convicted on counts of fraudulent financial activities, totalling millions of Jamaican dollars. One example was the *Quick Cash Partner Plan* which was confined to the parish of Hanover and involved investments of at least J\$50 million.<sup>16</sup> Our research has identified 21 more informal investment schemes which are currently operating in Jamaica. These include *Cash Plus*,<sup>17</sup> *USIMO*, *Overseas Locket International Corporation (OLINT)*,<sup>18</sup> *World Wise Partners*,<sup>19</sup> *Higgins Warner Limited*, *F1 Trading*, *Lewfam Club*,<sup>20</sup> *Maydaisy/Diedre Matthews*, *Inter Trade*, *Expert Prudential*, *Write Vision*, *Keen Exchange*, *Emerald Proprietors/Emerald Private Club*, *Wealth Builders*, *CARIEF*, *Personal Trading*, *SGL Holdings*, *Strategic Alliance Investment Company*, *A3 Union*, *Partner Financials*, *Kingdom Investments Unlimited International (KIUI)* and *Image Consultants & Services*.

These schemes share several basic attributes. They offer monthly returns of a minimum of 10 percent on local currency investments,<sup>21</sup> and stipulate that withdrawals of initial investments take place after a minimum of three months;<sup>22</sup> each new member is required to provide a tax registration number and other personal details; is required to complete an application form; and needs referral from existing clients - existing clients on the other hand are rewarded for recruiting two or more new participants.<sup>23</sup> Although most entities are located in Kingston and Montego Bay, a large number of them offer online services to clients. Through their online services, clients can view account activity, make deposits and encashment and transfer funds between accounts.

Foreign exchange trading is the claimed activity for most informal investment schemes in Jamaica. Deposits are invested by fund managers who are members of

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<sup>14</sup>Paul Reid & K. Wright. "More Partner Plan Troubles: Tales of Riots and Arrests," *Jamaica Gleaner* (Kingston)

<sup>15</sup> *Speedy Cash* collected over J\$100 million from investors and collapsed in 2001.

<sup>16</sup> See "Higgler convicted in pyramid scheme," (March 2004). *Jamaica Gleaner*.

<sup>17</sup> *Cash Plus* was established in 2002 by mortgage banker, Carlos Hill.

<sup>18</sup> *Olint* started in 2003 by David Smith.

<sup>19</sup> This was established in 2003 by current director, Noel Strachan.

<sup>20</sup> *Lewfam* started in 2004.

<sup>21</sup> Some schemes require deposits in US currency, however monthly interest rates for these start as low as 6% for the minimum deposits.

<sup>22</sup> If there is withdrawal before the stipulated date, clients will forfeit any interest that may accrue to them in the month of the withdrawal.

<sup>23</sup> In *Cash Plus*' referral program clients who refer at least two (2) persons to the company can receive a minimum of \$100,000 towards the purchase of a home in *Cash Plus* Real Estate Development or a minimum of \$5,000 towards the closing cost of a home.

other investment clubs (such as OLINT), foreign exchange traders across the world, or fund managers. Although the trading activities of a few are not known to the public, there are entities such as Cash Plus which are taking part in a wider range of business activities, such as real estate, telecommunications and other commodities and securities trading ventures.

### **Box 2: A Probabilistic Assessment of the IIS**

The alternative investment schemes currently providing services in Jamaica offer payouts that range from six percent monthly for a three-month deposit in World Wise to 20 percent monthly for a US dollar rollover in MayDaisy. These offers are equivalent to annual returns of 201 percent at the low end to a high of 728 percent. Such high payouts raise a probabilistic question. How likely is it that a legitimate trading or investment activity can sustain such returns over a period of five years?

There are only two possible ways to generate any return on an investment or trading activity. Either the underlying asset in which the investment is made rises in value by a commensurate amount or, in the absence of such a rise in value, the traders who have bought cheap and sold dear gain at the expense of those on the other side of the same transactions; the latter will have necessarily bought expensive and sold cheap, and so must collectively suffer a corresponding loss.

In the first case, the legitimacy of these schemes therefore rests on the likelihood that underlying assets can experience such spectacular, sustained rises in value. One of the most spectacular performances in the American stock market in recent years is the rise in share price for Hansen Natural Corporation. A US\$100 investment in Hansen at the beginning of 2003 was worth \$120,000 by October of last year. That 4-year run up is equivalent to an annual average return of 160 percent. Even that market leading performance falls short of the lowest returns being offered by the IIS in Jamaica. Such increases are not only highly unusual but – as typified by this case – only last for short periods of time: the Hanson Stock has lost a third of its value since its October peak

If we use other indicators of underlying value, a similar conclusion emerges. The highest return on capital in the U.S. economy last year was only 53 percent, achieved by Bare Essentials Beauty, Inc., a personal care products provider. Amongst Mutual Funds, the top performer last year was AIM's China Fund, which grew by 108 percent. But not even that performance is sustainable if one looks at the top performing fund over two years, the best performer, T. Rowe Price Latin America, achieved only 57 percent annually, while the top performer over a 5-years was lower still at 53 percent. The impressive returns being offered by Jamaica's IIS, therefore, are almost certainly not derived from rises in the values of underlying real assets.

In the absence of higher underlying asset values commensurate with the returns being offered, then the positive gains of some traders must be matched by the negative returns of the remainder. However, this possibility establishes an upper limit to the activity. As the size of the investment pool in the high return schemes grows, the losses of the losers must also grow commensurately. Since traders who are losing on an investment or trading activity will at some point pull out or change strategy, the informal schemes have a finite limit. Much has been made in the local press of the possibilities of high returns being generated from foreign exchange trading. Aside from the illogic of the claim that such high rates of return can be generated over long periods of time from, there is no empirical evidence to support it. The most successful quantitative fund over a five year period managed to return only 40 percent annually – an impressive result for the currency (or any) market, but far below those offered by Jamaica's IIS.

The conclusion is that sustainable returns of more than 200 percent annually are unprecedented and therefore highly improbable from investment and trading activity alone. Because the activities of Jamaican IIS are not reported, and thus not publicly known, it is impossible to establish with certainty that they are pyramid schemes. Some, apparently, have some fixed assets, and thus may better be described as hybrid schemes. Nonetheless, the circumstantial evidence suggests very strongly that the high returns being offered by these schemes are derived from pyramid activities.

### ***The Financial Services Commission and Informal Investment Schemes***

The local non-bank regulatory authority, the Financial Services Commission (FSC) has acted against at least four schemes in recent times, thereby placing a cease and desist order on their operations. Interviews with representatives from the FSC revealed that these and other investment clubs could be in breach of sections 7,8,10 & 26 of the Securities Act. Sections 7 and 8 stipulate that it is unlawful for persons to offer business contracts for securities dealing without a licence and that persons are prohibited from carrying out the business of providing business advice without holding a licence to do so. Section 10 states that “every company which is licensed under section 7 or 8 shall appoint an officer of that company ... (who is) answerable for doing all such acts, matters and things as are required to ensure compliance with the provisions of this Act, and the regulations made...” among other responsibilities. An extract of section 26 reads “subject to subsection (4), every issuer shall, within the prescribed time and before issuing any security, apply to the Commission in the prescribed form to be registered in respect to that security.”<sup>24</sup> Whilst acknowledging the limitations of the government and regulators in influencing the investment decisions, the FSC continues to offer advice to the public and encourages it to remain sceptical of businesses that offer extraordinarily high returns.

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<sup>24</sup> For further details consult the Ministry of Justice website (<http://www.moj.gov.jm/>).

## **IV. SURVEY RESULTS: THE IIS INVESTOR CLASS IN JAMAICA**

This section highlights the main characteristics of clients involved in informal investment schemes in Jamaica and how their preferences affect the formal banking system. Undoubtedly, an individual's decision to invest is always driven by a desire to earn high returns;<sup>25</sup> investor preferences, on the other hand, are ordered by those investment options that will not only meet this objective but offer added benefits. However, it would appear that often times many clients simply do not fully understand the intricacies of the financial market place (both formal and informal). Here, we not only concentrate on the motivations and perceptions of the typical IIS investor in Jamaica but more so, on those factors that drive the general investor class within the economy.

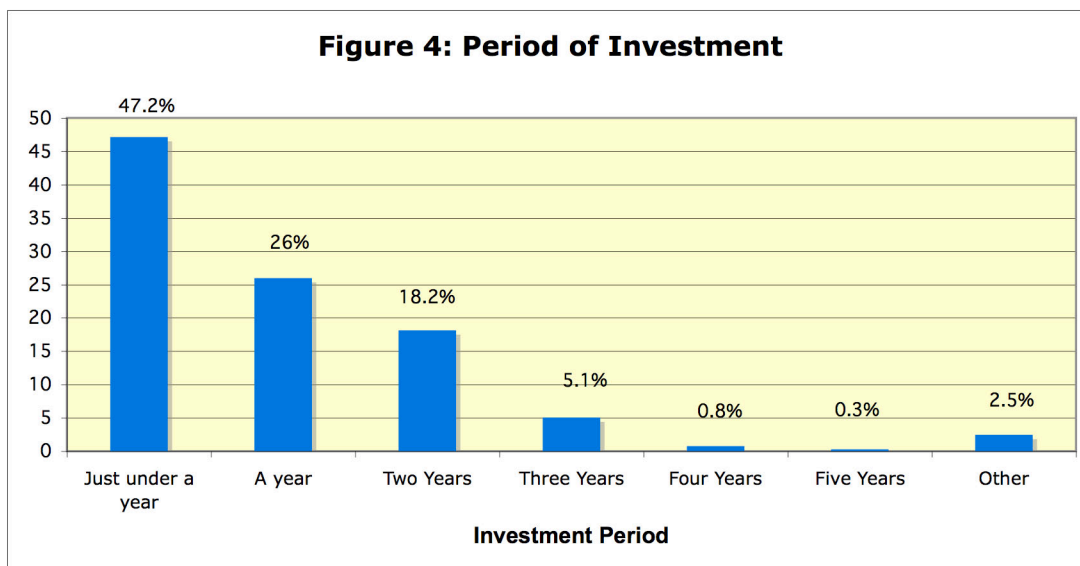
This survey covers 402 investors of the main informal investment schemes and was carried out over a two-week period in late November 2007. Because it is a study on an emerging informal activity that urgently needed assessment in Jamaica specific details were overlooked; particularly the influence of money laundering and remittances. On the other hand, the survey contains information on the social, economic and even psychological push-factors which have led investors to invest in these schemes.

### ***Size and Extent of Investment in IIS***

It would appear that most persons have joined relatively recently, since the majority admitted to investing for only a year or less (Figure 4). It is speculated that this trend is the result of the increased publicity these schemes have received since the intervention of the Financial Services Commission and the general financial community. Another possibility is that the upsurge in participation is due to increased promotion by the principals of these schemes, who have aggressively recruited more investors so as to broaden their capital inflow-base, thereby financing their activities. Whether or not these speculations are correct, all things being equal, our survey reveals possible continued support from the public, as over 60 percent of respondents plan to continue investing over the next five years.

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<sup>25</sup> More than nine-tenths of the respondents attested to this.



In general pyramid schemes require an exponential growth in the number of participants in order to meet payment obligations to earlier investors. The above exponential growth in the number of participants does not prove that the IIS are pyramid schemes but merely allows for that possibility. Our findings demonstrate that informal investments have become an increasingly popular choice for informal investors. A significant number of interviewees – seven in ten claimed that even their closest friend in Jamaica had invested in local IIS. Further inspection reveals that over 58% know between 1 and 10 persons,<sup>26</sup> 27 % reported 11- 30 persons, 10% said between 35 and 300 persons and 4% reported 350 - 3,500 persons. Using the actual values for each response, we have estimated that at least 14,321 other participants can be easily identified among the 300 interviewees. While the total number of investors in informal investment schemes is undoubtedly much larger than this figure, it is highly unlikely to be a nation-wide phenomenon in both geographic and socio-economic terms, and therefore the total numbers probably do not exceed the tens of thousands. Not only does our survey suggest this, but the minimum deposit in most of these schemes of J\$100,000 puts it beyond the reach of most Jamaicans. Furthermore, several schemes require members to have internet access, which excludes most Jamaicans. Finally those schemes that are not web-based require a physical retail infrastructure to support their client-base and the known retail structure amounts to a few branches and a paid staff in the dozens, which is smaller than even Jamaica's smallest bank. This makes it unlikely

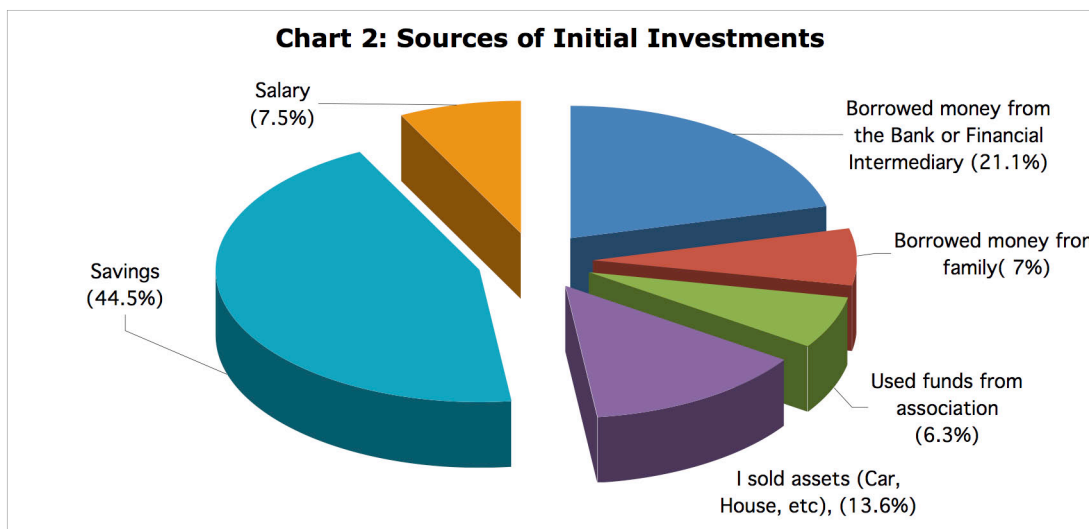
<sup>26</sup> Based on our survey, the modal number of persons which these respondents could identify from similar schemes was 10. We are however unable to provide an estimate of the overall population of investors belonging to these schemes. Furthermore, when we contacted representatives from the FSC they also expressed difficulties with identifying an appropriate estimate.



that the client-base of these schemes reaches into some of the higher figures that have sometimes been mentioned.

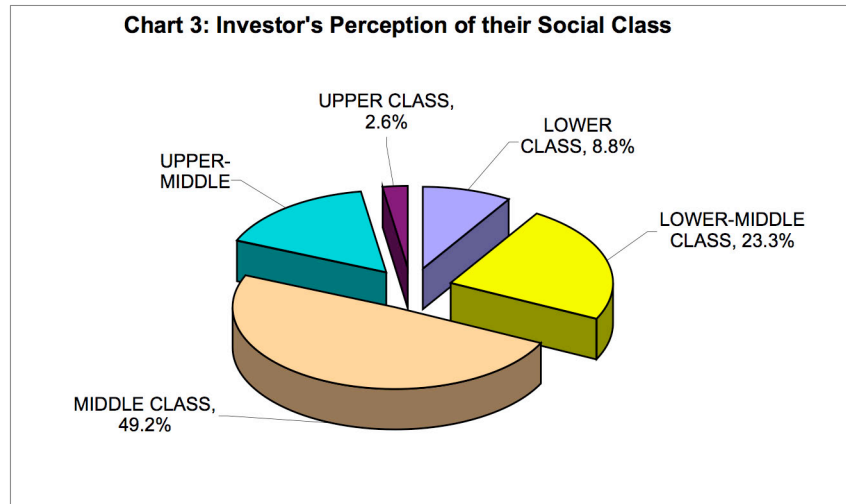
Our research shows that a relatively large collective amount is already invested in these schemes. Although the modal deposit range was J\$200,001 to J\$300,000, most persons (82.4%) have invested under \$600,000 and only a very small proportion (8.9%) have invested between J\$1,000,000 and J\$100,000,000. In addition, a collation of estimations from various financial institutions ranges from J\$100 - J\$200billion.

The influence of these schemes does not stop at the door of the formal banking system. As will be seen, the financial intermediaries are “middlemen” for both the investors and promoters. Promoters deposit their proceeds and withdraw when necessary, while depositors borrow loans or deplete savings in order to acquire sufficient initial capital for deposits. Interestingly, males are more inclined to use their salaries and savings, while females are more likely to borrow instead of resorting to loans from financial institutions and family members. As it turns out, the formal financial community provides loans for up to 21% of these investors (See Chart 2).



**Profile of the IIS investor class**

The investors are mostly between the ages of 25 and 40 and are predominantly from the middle class. Almost all participants are employed, whether full-time (71.9 %), part-time (4.3%) or self-employed (10.9%); the remainder are students (6.1%), retirees (2.8%) and housewives (0.5%). As illustrated below they are from varying occupational backgrounds; more than a fifth are managers and/or supervisors; while just under one-third are professionals, working in the field of law, medicine, and teaching. Hence, on



the whole, the participants - approximately 54% - have professional or managerial jobs that generate stable incomes. This is closely related to the fact that the majority of respondents are from the Kingston Metropolitan Region. Further examination of these research findings also revealed that as a group, female investors tend to occupy the extremity of the class spectrum, lower and upper-class groups, while male investors are more inclined to come from the middle classes.

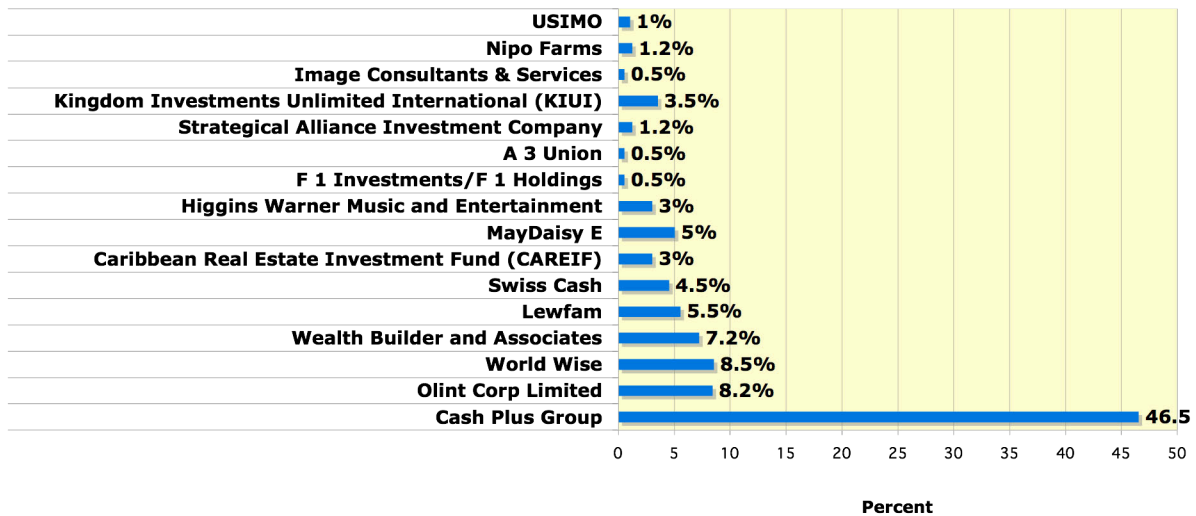
<b>Occupation</b>	<b>Percent of Respondents</b>
UNSKILLED WORKER, LABOURER	2
TRADESMAN, SKILLED WORKER	8.4
CLERICAL, OFFICE WORKER	13
BUSINESS OWNER (MICRO ENTERPRISE)	5.4
BUSINESS OWNER (MEDIUM ENTERPRISE)	2.3
BUSINESS OWNER (LARGE ENTERPRISE)	0.3
BANKER	14.8
TEACHER	2.8
PROFESSIONAL (lawyer, doctor, architect, engineer etc)	14.3
MANAGER, SUPERVISOR	22.2
SHOPKEEPER	0.5
HIGGLER, VENDOR	1.3
FARMER/FARM WORKER	0.3
JUGGLING, HUSTLING	1
RESPONDENT HAS NEVER BEEN EMPLOYED	0.3
Other	11.2
Total	100

**Popularity of Each Scheme**

Cash Plus is by far the most popular choice among respondents, accounting for almost a half of the informal investment population (46.5%), according to our survey. Schemes such as Olint, World Wise and Wealth Builder follow suit, but only cover a little less than 10 per cent each of the investor class. This is to be compared with A3 Union, F1 Investments/Holdings and Image Consultants & Services, which each accounted for less than 1% of investors and the remaining number of schemes (9 out of 17 surveyed) which together accounted for less than 6% of investors.

Risk spreading among the alternative investment clubs is a common practice among investors, especially those outside of Cash Plus. The results show that although Cash Plus is the popular choice for investors, only a comparatively small percentage of investors actually invested in other types of informal investment schemes. The investors of Olint, World Wise, Swiss Cash and Lewfam have relatively more investors who are involved in more than one scheme, while Kingdom Investments are common for investors who spread risks among two or more schemes.

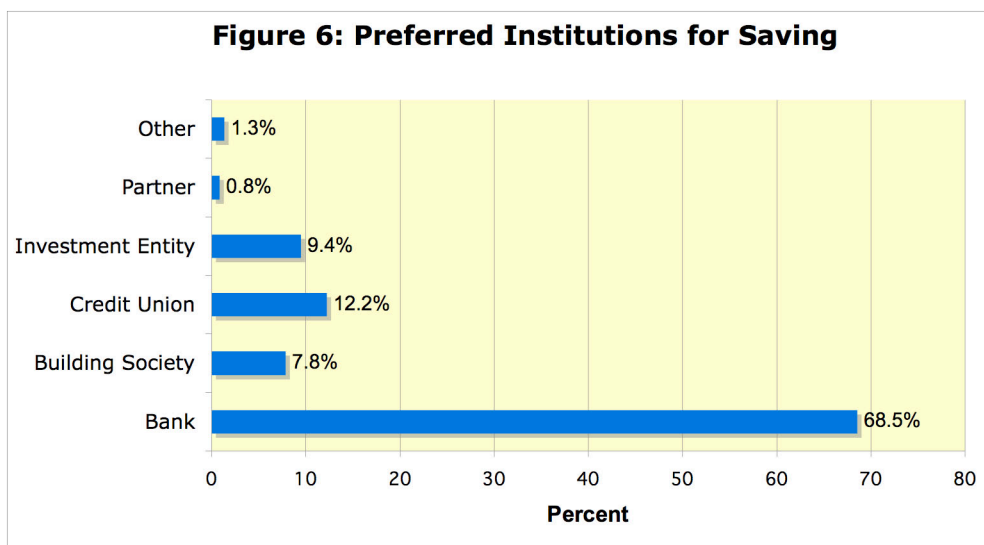
**Figure 5: Percentage of Investors in each Scheme**



**Investors' Perception of other Collective Saving Systems**

Jamaica's *partner* system has declined in popularity. Moreover, the partner system is judged by most survey respondents to be a 'poor man's' saving mechanism. According to the results, only a tenth of respondents currently participate in a partner plan, while only 44.6% professed to trust this informal collective saving arrangement – this is to be compared with the 89% who trust the regular banking system.<sup>27</sup> This trust for the banking system is manifested in investors' willingness to save in regular banks (Figure 6); over 94.7% of the IIS investors claim to be savers and of this amount, approximately 7 in 10 say that they are holders of a savings account in a regular bank.

Credit unions, building societies and other investment entities (e.g. partner schemes, transfers to overseas accounts) are some of the other popular choices, even for those who already have accounts with the banks. Investors are nonetheless sceptical about the objectives of the banking system in meeting their needs.<sup>28</sup> Over 90% of savers say they think the banks' interest rates are unreasonable and almost the same fraction believe that the banks do not support their objectives.



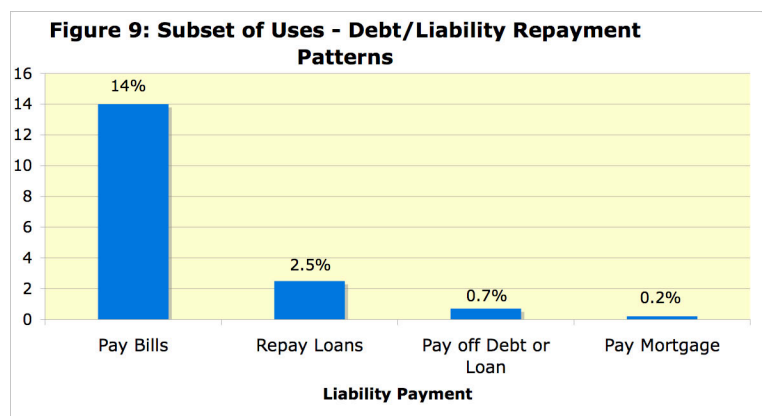
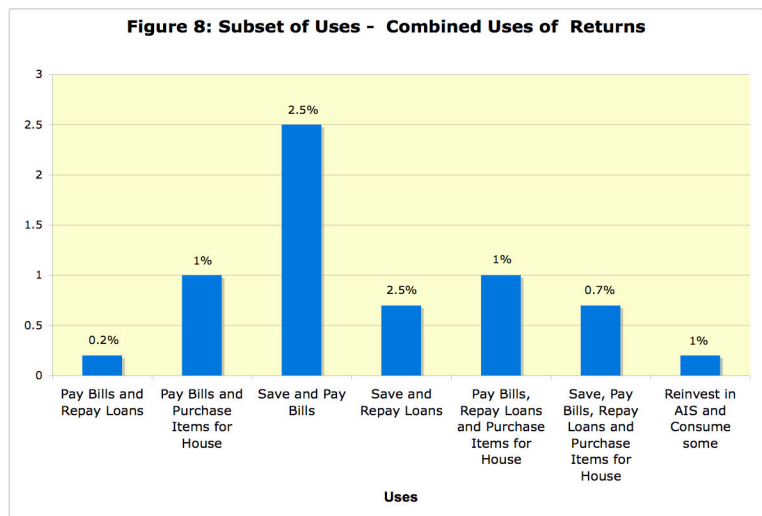
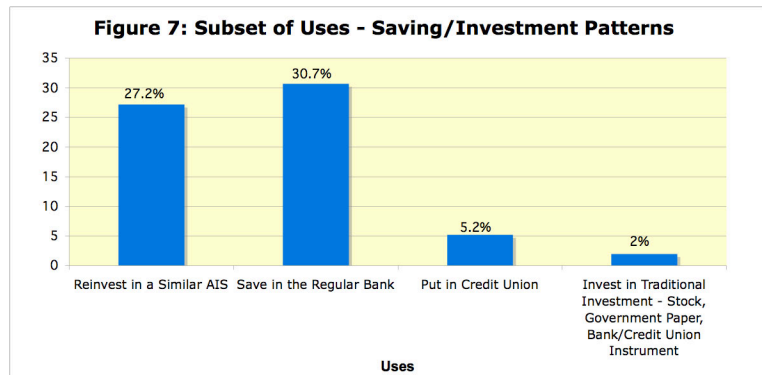
<sup>27</sup> CaPRI's previous research (under its "Taking Responsibility" title) revealed that this lack of trust has caused the decline in the traditional partner system. Respondents explained that this breakdown of trust is due to the increased risks that are involved. Their main complaints were that "we no longer save with people in our community because people running off with people money." For further information, see Caribbean Policy Research Institute (CaPRI). "The Jamaican Economy since Independence," **A Working Paper**, pp. 56-57.

<sup>28</sup> This research also showed that diversification of investment/savings portfolio is a common practice among local investors. The money market, stock market and other non-banking investment vehicles were popular investment institutions among the Greater Portmore residents.

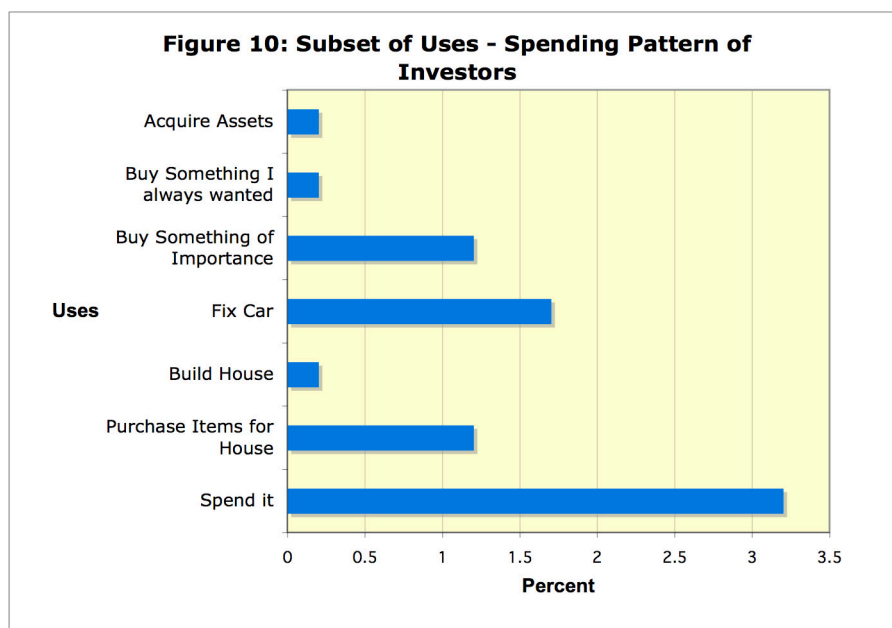
**Uses of Investment Returns**

Our survey reveals a continuing willingness on the part of IIS investors to participate in the formal financial system, particularly the banking sector. They not only rely on loans to finance up to 20 percent of the deposits to these schemes but they also display enough trust in banks, thereby securing most of their savings in these financial intermediaries. Tellingly, these investors are almost as likely to reinvest their returns from the IIS in the formal financial sector, as they are to reinvest in the IIS. Over 30 percent have saved returns in commercial banks, 5.2 percent have reinvested interest receipts in credit unions, 2 percent have reinvested in traditional investments such as the stock market, bond market and other bank or credit union instruments (Figure 7). Only 2.5% of respondents reported using their funds to finance businesses.

The desire to earn higher returns remains an important motivating factor in determining where to re-invest – over 27 percent of the investors surveyed have reinvested their returns in these high return-generating schemes. Moreover, our findings revealed that the compounding of returns is a common practice among those respondents who have invested large deposits. A clear 22 percent of those who reinvested in these schemes, claimed to have made initial deposits ranging from J\$1,000,000 to J\$100,000,000.



These findings demonstrate a heightened interconnectedness between these schemes and the formal financial sector; most investors use their savings or loans from banks for initial investments in these schemes, most are savers and display a high level of trust in these banks and most are willing to reinvest their returns in the regulated financial sector. It is somewhat worrying, however, that the proportion of persons that repay loans using these returns is almost one-seventh of the portion that use loans from banks for initial deposits. The implications of this result, for the financial sector, largely rest on a number of factors: the conditions of the loan agreements, other sources of loan repayment by the investors and the time-horizon (e.g. maturity etc.) of the loan products offered by the sector.



Other popular uses of the investment returns include bill payments, which accounts for over 14% of the amount spent on expenses. Spending approximates just 8 percent and is spread over a wide range of items for the house, car or simply the purchase of assets. This relatively small spending contribution was later confirmed by an econometric estimation which illustrates that the encashment of funds to a number of informal investment schemes is almost unaffected by changes in production.<sup>29</sup>

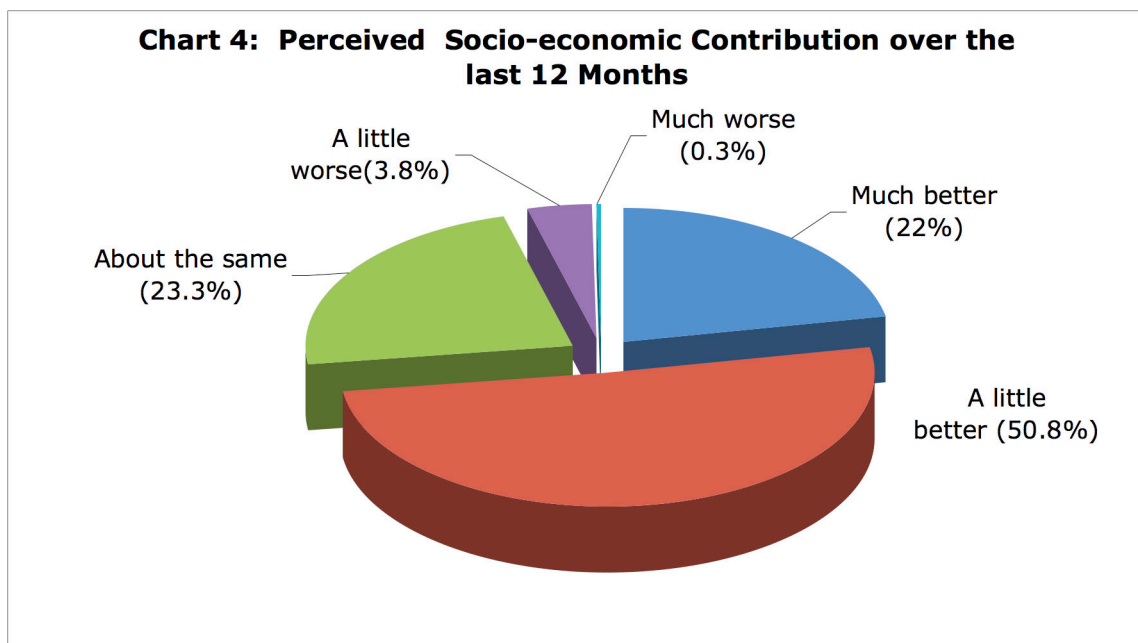
<sup>29</sup> The estimation revealed that every 1% change in encashment is explained by a very negligible change in the production of energy products, which is used as a proxy for economic output. This means that an investor's demand for returns from these schemes is not largely determined by the desire to spend on luxury items and other goods (see appendix 2 for further details).

In sum, investors are generally more inclined to reinvest their returns than they are to spend. The formal banking system is the main re-investment choice; however the compounding of these returns in these alternative investment entities is also a common practice among investors.

## V. OTHER SURVEY FINDINGS

### **Socio-economic Gains and Investor Expectations**

With the exception of 3 participants, everyone in our survey group reported gains, and an estimated total of over J\$138 million has already been repaid to 271 persons. It would appear that the gains from these investments have improved the economic well-being of householders: when asked, “How much do you believe your situation is DIRECTLY as a result of the investments that you have made?”, 81 percent said that they believe that the schemes positively contributed to their households, 35 percent strongly believed this to be true. In terms of a rating of the extent of improvement in their economic circumstances over the last 12 months, most individuals said that their economic situation was either a little better or much better (72.8%), almost a fifth believed that things remained the same and only a handful (4%) complained that they had been made worse off (Chart 4). An even larger proportion of individuals, 9 in 10, foresaw continued economic improvement over the next year.

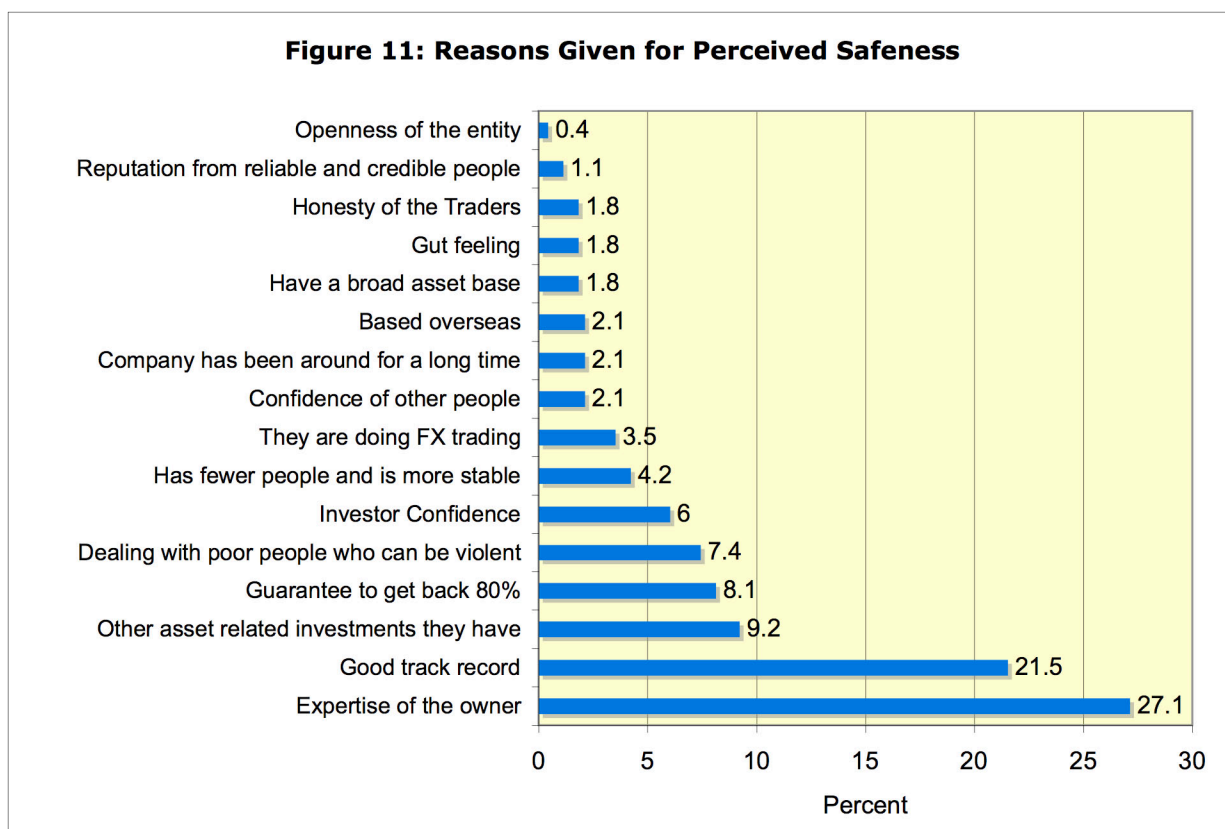


### **Risk Motivation and Perception**

“Olint is the safest!” say half the respondents, even though over a half of them are involved in Cash Plus. On the other hand, Cash Plus is rated second in terms of being able to secure their investments, thereby capturing a third of the votes. World Wise and Caribbean Real Estate Investment Fund are comparable, while MayDaisy, Swiss Cash and Wealth Builder and Associates are rated the least safe entities.



The reasons given for the “safeness” of Olint and Cash Plus and the others, to a lesser extent, were predominantly based on perceived knowledge of the capacity and capabilities of the key masterminds of these operations (Figure 11). In general, most investors proclaim that these entities are safe because the schemes have a good track record or their leaders are experts in their own right. However there is reason to believe that another factor may be in play. The long history of inflation and currency instability in Jamaica provides a compelling incentive for investors or wealth holders to want to hedge the risks by investing in hard currency, something which several informal investment schemes purport to do (see Box 3).



**Box 3: Local Investors' Behaviour: Currency Substitution**

Jamaica's financial system has been characterized by *volatility* throughout the years following the reforms of the 1980s to 1990s. As a result, there is reason to envisage a breakdown in established money demand relations, that is, the factors which influence the amount of money held by individuals.<sup>30</sup> Indeed, the historical characteristics of the Jamaican economy and its degree of openness could increase the degree of domestic financial risks. This is why estimating the factors that influence the demand for money in Jamaica requires the inclusion not only of the transaction and opportunity costs factors, but also the currency-substitution component which captures individuals hedging activities against domestic risks.

Macroeconomic theory argues that a person's decision to withhold money from the banking system is influenced by disposable income, interest rates, the price level and the exchange rate. For instance, as a person's real income increases and as interest rates rise, people are more inclined to save rather than spend, hence money demand decreases. These responses are respectively referred to as the transactive and opportunistic components to withholding money outside of the formal banking system. The exchange rate evokes a similar response: as the local currency decreases in value, individuals are more inclined to convert local currencies into stronger ones so as to minimize the risks of losing the value of monetary resources. This activity is referred to as currency substitution.

Using a simple money demand equation as illustrated below, a recent study by Richards (2006) revealed that between 1996 and 2005, currency substitution had the strongest impact on money demand in Jamaica.

*The Money Demand Function*

$$m_t = \beta_0 + \beta_1 p_t + \beta_2 IR_t + \beta_3 EX_t + \beta_4 y_t + \varepsilon_{1t}, \text{ where } \beta_1 = 1, \beta_4 > 0, \beta_2 < 0 \text{ and } \beta_3 < 0$$

The above are defined as:

$m_t$  - Demand for money

$IR_t$  - Interest Rates

$p_t$  - Price Level

$EX_t$  - (J\$/US\$) Exchange Rates

$y_t$  - Real Income

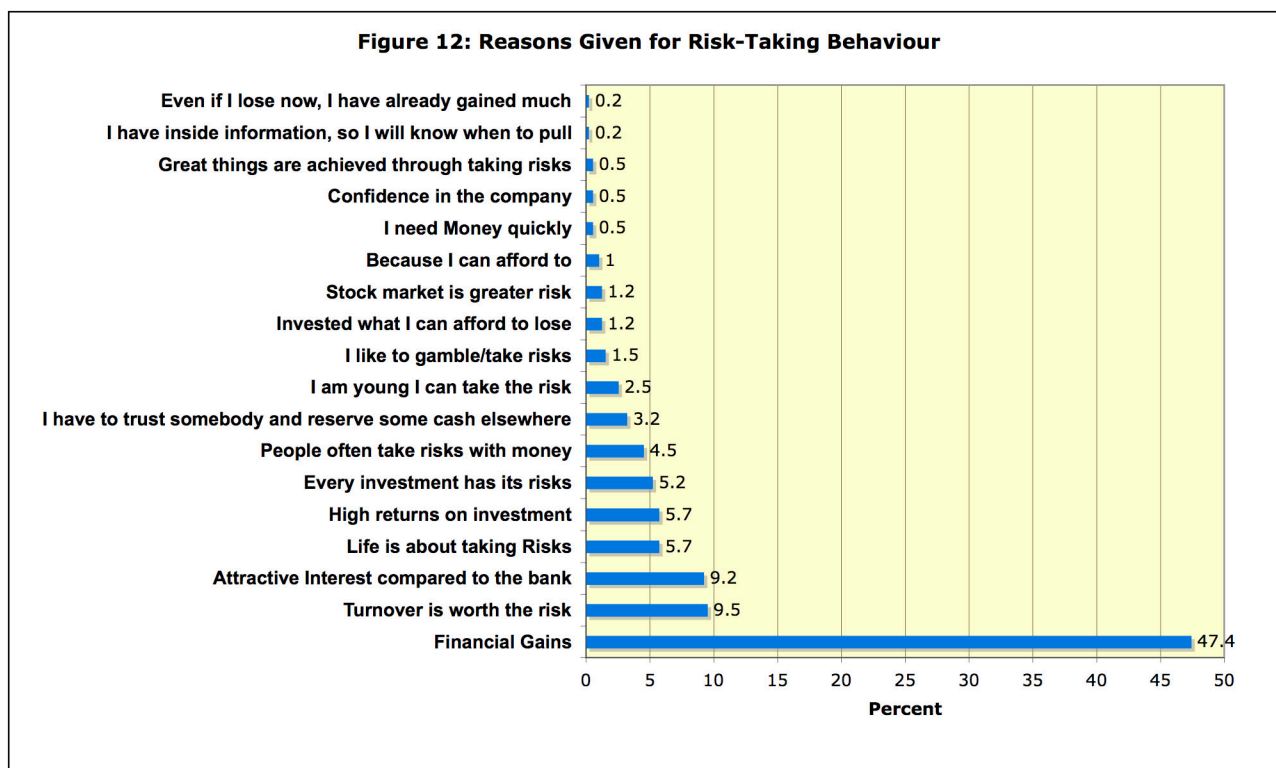
$\varepsilon_{1t}$  - Deviations from the long-run equilibrium

$\beta_i$  -Parameters to be estimated

The results show that money demand depends on the transaction needs, in accordance with theory. However, the coefficient value indicated some amount of income inelasticity, such that a 1% change in income would lead to a smaller percentage (0.014%) change in the money supply. Hence, the transactive component is relatively weak and so there is scope for the growth of the money supply to not be highly inflationary as aggregate output expands. The opportunity-cost relation is captured by the coefficient for interest rate. Though this had an unexpected sign, the estimated semi-elasticity is significant. This unexpected sign might result from a data problem, as pointed out by Crockett and Evans.<sup>31</sup> They argue that there is a possibility that the treasury bill rate used does not proxy the opportunity cost but that it might be proxying its 'own rate'. The exchange rate coefficient represents the degree of currency substitution that takes place in the economy. With the largest coefficient value of -0.74, currency substitution emerged as having the greatest impact on domestic money demand. The interpretation is that a 1% devaluation of the exchange rate causes domestic money demand to decrease by approximately 0.74%.

<sup>30</sup> See Fiona Atkins, 'Financial Crises and Money Demand in Jamaica.' London: Birkbeck College, University of London Working Paper, 2005.

Despite the IIS investors' confidence in the "safeness" of these schemes, almost everyone accepts that there are risks associated with investing in these schemes, but they remain willing to take them.<sup>32</sup> This is evidence that though they claim to recognize the risks, investors might not fully appreciate the risks involved. Even though respondents claim to appreciate the riskiness of their investment decision, their attribution of high returns to the skills of the principals of the schemes belies their understanding of the limitations of financial markets. Interesting is the finding that over nine-tenths of IIS investors perceive this risk to predominantly involve the failure of the business and a consequent loss of both principal and interest. Less than six percent, on the other hand, believe they stood to only lose their principal or their interest or that the government could protect them from losing. But what accounts for this unusual risk-taking attitude? In explaining, most allude to the financial gains to be had (47.4%), others claim the turnover to be worth the risk (9.5%) while still others simply see it as an alternative to investing in banks (9.2%), among other reasons.



<sup>31</sup>Andrew Crockett and O. Evans (1980), "Demand for Money in Middle Eastern Countries," *IMF Staff Papers*, 27 (1980): 543-577.

<sup>32</sup> An estimated 96% believe there are risks and over 97% say they are willing to take these risks anyway.

## **VI. THE POTENTIAL THREATS OF IIS TO JAMAICA**

High-yield investment schemes are hardly peculiar to Jamaica. There have been recent experiences in Kenya,<sup>33</sup> Haiti, Sri Lanka,<sup>34</sup> the Czech Republic, Slovakia, Bulgaria and Yugoslavia.<sup>35</sup> Particularly instructive to the Jamaican case are the recent experiences of Romania and Albania.<sup>36</sup> Using a *comparative analysis* we examine the conditions that preceded the collapse of schemes in Romania and Albania and then weigh these against those conditions that currently exist here in Jamaica. A social impact analysis evaluates the likelihood of social unrest should the schemes fail. Finally, an *economic impact analysis* is also used to evaluate the movements of key economic variables over the last 16 months, to determine how changes in these variables could affect the economy in the future.

### **Comparative Analysis**

#### **Romania (1990-1994)**

Nothing appears to come closer to describing what is currently taking place in Jamaica than the documented accounts of Romania's largest pyramid scheme, the *Caritas*. Some common threads include: rivalry between the schemes and the banks,<sup>37</sup> the two parallel track of investors (the insiders and the regular investors), the three-month minimum investment stipulation, long lines for deposits and investment returns,<sup>38</sup> the selling of personal assets for initial deposits, the multiplication of deposits by unusual amounts (eight-fold in three months), a minimum deposit requirement and a founder who had the requisite skills and knowledge to operate such an entity.<sup>39</sup> Like the present situation in Jamaica, authorities, both locally and internationally (including the IMF), found it difficult to estimate the number of participants in *Caritas*. One estimate was that it accounted for 10 percent of the population; another was that it involved 35 to 45 percent of all Romanian households. In terms of monetary value, the amount invested was a large sum. Some estimates were that *Caritas* had managed over 20 percent of the government's total expenditure in 1993 and that the pay-outs were enough to overtake Romania's GDP within three months. The main impact included a depression

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<sup>33</sup> Oyuke, John (May 2007). "The allure of informal investment schemes in Kenya," African News Network: <http://tradeafrica.blogspot.com/2007/05/allure-of-informal-investment-schemes.html>.

<sup>34</sup> Irangika Range and Samarasinghe Anjana, Online News Article - The Associated Newspapers of Ceylon Ltd, "Pyramid schemes threaten economic stability – FitzPatrick," produced by Lake House.

<sup>35</sup> Katherine Verdery, "Faith, Hope and Caritas in the Land of the Pyramids: Romania, 1990 to 1994," *Comparative Studies in Society and History*, Vol. 37, No. 4 (October 2005): 626.

<sup>36</sup> Jarvis, Christopher (March 200). Finance and Development, *The Rise and Fall of Albania's Pyramid Schemes*, International Monetary Fund (IMF), Vol (37), No. (1).

<sup>37</sup> *Ibid* 626: the main bank at the time was the Romanian National Bank.

<sup>38</sup> *Ibid* 627: Caritas started in April 1992 but by fall 1993, standing in lines to make or receive payments would take the entire day.

<sup>39</sup> *Ibid* 62: the founder, Ioan Stoica, worked as an accountant and a currency trader in the black market.

of the market for unskilled labour;<sup>40</sup> reduction of the monetary overhang (through the circulation or reallocation of money which had been locked away by households); and increased access to capital formation for those in need of low-interest loans.

Ominous signs began to appear just a year and half after *Caritas* started. There were talks about the intervention by legal authorities to ban the activities of the collective schemes, payouts were late, the payout period eventually lengthened, the number of depositors fell and recruiters resorted to opening new branches in other cities. By May 1994, the founder, Ioan Stoica announced the demise of *Caritas*. This resulted in a number of lawsuits and hunger strikes by groups of investors. Nevertheless, despite fears, there was no social civil unrest or ethnic violence.

### **Albania (1992-1997)**

Albania had a more devastating experience with informal investment schemes than Romania. Like all pyramid schemes, those in Albania (such as Sude, Xhafferi, VEFA and Populli) grew rapidly as news about their high returns spread across the country. They also had a two parallel track, interest rates were exceptionally high and spending by the promoters was ostentatious.<sup>41</sup> The population of depositors was massive, as there were over 2 million depositors involved in the two main schemes – out of a population of 3.5 million. The returns also sky-rocketed within months: increased competition among the schemes led to returns of 300 percent, after a couple of months, in some cases. The total amount deposited eventually reached \$1.2 billion dollars, or 50 percent of GDP.

The collapse was swift and harsh. It all started in November 1996 when one scheme defaulted on payments, leading to widespread panic among investors in other schemes as they began to lose confidence in the sustainability of pyramid schemes. Intervention by the government and financial regulators started with the freezing of accounts, a ban on pyramid schemes and the limiting of daily withdrawals from those schemes which were still operating. It soon became clear that these interventions were too late and too public. Eventually there was chaos in Albania; weapons were looted from the network of armories that dotted the country, a legacy of the Cold War preparedness for a possible invasion from outside. It was later discovered that over 2000 persons had been killed in the violence that followed. The government was forced to resign and government offices were destroyed. The currency began to depreciate; the balance of payments deteriorated and prices rose by 28 percent within months. In spite of all this, the impact was short-lived, with the most damaging impact resulting from civil unrest.

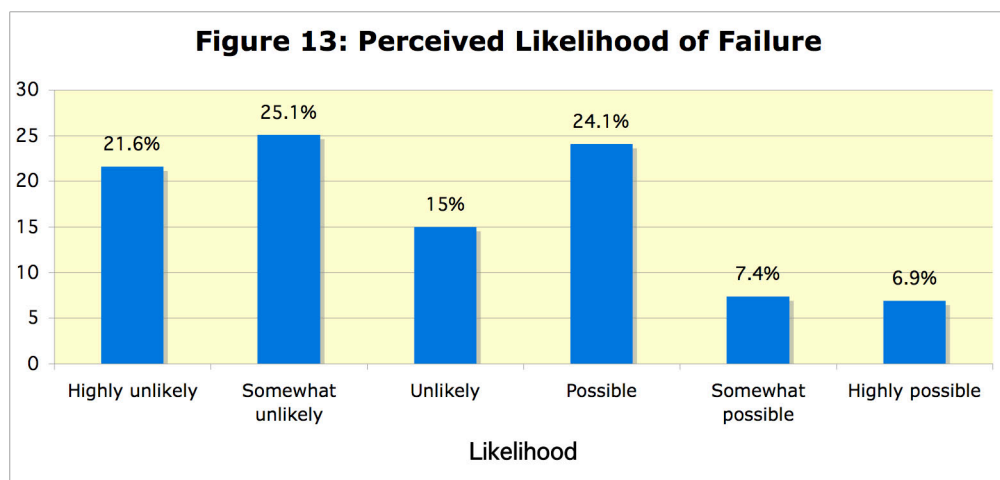
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<sup>40</sup> *Ibid* 63: there had been a reduction in the supply of unskilled workers who were no longer available since they could easily make returns far exceeding their salaries.

<sup>41</sup> Already cited, see note 37.

**Jamaica**

Undoubtedly, there are similarities between the schemes in Jamaica and those of Albania and Romania - the structures and daily operations, the enthusiasm of investors,<sup>42</sup> the selling of personal assets for initial investments and a vibrant and expanding informal economy. Of even greater importance are the similarities between the conditions that preceded the collapse in these countries. Despite the existence of a critical indicator of possible collapse – late payouts – the Jamaican IIS investors for the most part do not believe the schemes are likely to fail in the short-term (see Figure 13). In Albania and Romania, the inability of promoters to repay their investors on time always preceded the collapse of pyramid schemes. In the case of Jamaica, our research shows that while most local IIS investors have received payments on time, there have been times when they came late – this is the complaint of over a fifth of the respondents. Nevertheless, over 40% of these respondents know someone who has had difficulties getting back their interest.



<sup>42</sup> Though we cannot say whether those investors in Albania and Romania knew the risks of investing, an apparent majority of the local Jamaican investors in informal investment schemes are aware of these risks. When asked about the possible outcome of a failure, investors believe for the most part that they will be able to retrieve their initial investments, as guaranteed by the scheme. This response is the view of 131 investors out of 348 respondents (more than a third). However, another third of investors did not receive a guarantee but are willing to take the risk anyway. This number was not significantly lower, capturing 35.1% compared to the 37.6% who did receive a guarantee and believe it - suggesting that, while most people expect to be compensated, a considerable amount are willing to accept a loss.

### **Social Impact Analysis**

In evaluating the potential threat that Jamaica faces, we examine two important factors from the stories of Albania and Romania. We judge that the bottom line factors which contribute to the social and economic impact on the individual and the economy will depend on the extent to which Jamaica is susceptible to social dislocation and macroeconomic instability as a result of these schemes. From our survey we are able to measure the possibility for social dislocation among investors and their households.

When the respondents in our survey were asked about their perception of other investors' reaction should their investment be lost, seven-tenths pointed to definite social disturbances, including protests and/or riots, violent outbreaks at business offices and the killing of the owners of these schemes. However, there are many reasons to believe that the likelihood of wide-spread social unrest is low. Nonetheless, the vast majority of respondents – eight-tenths – said they would personally view the collapse as a loss and do nothing. In our survey the vast majority of our respondents indicated an unwillingness to participate in socially disruptive behaviour.

Secondly and as presented above and contrary to popular perception, the IIS are not popular with poor Jamaicans but are largely the reserve of the professional and managerial class. Most respondents believe that when collapse occurs, they could lose any money they have left in the schemes: hardly any expect the government to bail them out. However, only a relatively small number of investors appear to have not committed a significant share of their wealth. In addition, most investors surveyed reported having withdrawn at least the equivalent to their principal already; therefore they will not suffer a net loss in the event of a scheme collapse. This will explain their willingness to absorb the loss and walk away. Only a small number of investors are highly exposed and therefore vulnerable; moreover, the scale of their investment is very large, suggesting they are very wealthy. This wealth alone will make them able to absorb the shock even if it is painful.<sup>43</sup>

There is another reason that social unrest is unlikely. In general the middle classes, a property owning class, have more to lose than gain from social unrest. They are therefore unlikely to be fo-mentors of social disturbance. Finally, it is worth remembering

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<sup>43</sup> It may seem counterintuitive that a pyramid-type scheme could return most of its participants the equivalent of their principal, since in normal circumstances most pyramid-scheme investors lose part of their investment. In the Jamaican case, though, our research suggests that a small group of investors, who account for a large share of total investments, are rolling over their investments. Thereby, they are effectively subsidising a large number of smaller depositors. In the event of a scheme collapse their loss would be huge. But the sheer scale of their investment suggests that many if not most of these investors are already wealthy (see Appendix 3).

that at the times informal investment schemes emerged in Albania and Romania, both societies were still emerging from long periods in which civil society and private economic activity had been repressed. The embryonic state of the financial sector, the lack of bureaucratic capacity and an appropriate regulatory framework for the emergent private sector, and the recent history of violence and social unrest, all created an environment which was both economically and socially vulnerable. In Romania inflation rates had reached 300 percent in 1993, real purchasing power decreased by over 40 percent since 1989, interest rates were negative (for some periods) and access to credit and loans proved problematic especially for small producers.<sup>44</sup> Like Romania, Albania's financial system was underdeveloped and deficient. This implied that the formal banking system -- particularly the credit system-- was inefficient and often inaccessible; moreover with growing levels of non-performing loans, the Bank of Albania was forced to impose tight credit ceilings on loans. This led to the creation of a number of informally operated companies that either offered credit or were deposit-taking institutions, which later turned into pyramid schemes. These differences suggest that the social disturbances that occurred in those two countries are unlikely to be repeated in Jamaica.

This is not to suggest that were a scheme to collapse, attacks on particular individuals and institutions would not occur. Security forces should be prepared for possible targeted violence. Nonetheless, there is little evidence that a systemic social breakdown will be a likely consequence of a scheme's collapse.

### **Economic Impact Analysis**

In the event of the collapse of one or more of these schemes a severe or long-lasting consequence is equally unlikely. As noted above only 20 percent of the participants in these schemes financed their investment with bank credit. Further prudential requirements would dictate that almost all of those loans would be collateralised by assets or secured by salary deductions. Therefore the impact of a wholesale collapse of the IIS on the balance sheets of the banking system will be minimal. There will be little contagion from the informal schemes to the formal financial system.

The economic effect of the collapse of the IIS will be largely confined to the personal accounts of the investors. This will undoubtedly produce a wealth effect on consumption – that is, the perceived loss of wealth will likely lead to a cut back of

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<sup>44</sup> Besides, the 15 percent credit that the Agricultural Bank offered at the time was often inaccessible and those who could access these loans ended up paying interest rates of 60-100 percent. There is evidence to suggest that these difficulties drove persons to sell farms, invest the earnings in Caritas and use the proceeds to buy tractors. See, Verdery, Katherine (October 2005).



consumption by all the participants of the scheme and therefore in the economy generally. The consequence of this could be a cyclical contraction in economic activity. In light of the limited exposure of most participants this effect should be neither severe nor long-lasting.

Further, the financial downfall of the 1990s remains a valuable lesson for Jamaican investors. It is no wonder that many are concerned about the potential impact of the failure of these informal investment schemes on the financial system. Indeed, an important deciding factor lies in the degree of development and improvement in financial regulation. To this end, the IMF's 2006 Country Report noted that supervision has been strengthened in recent times, with the Financial Services Commission regulating the non-banking sector since 2002, while the Bank of Jamaica overseeing the operations of deposit-taking institutions. They however reiterated the need for greater supervision, especially for those activities that are exposed to interest rate risks.<sup>45</sup>

But does this say enough about the economic resilience of the local financial system, given the existence of these **unregulated** activities? Researchers<sup>46</sup> have assessed some of the early indicators of financial sector distress. Their research shows that among the factors that preceded the banking crisis of the 1980s and 1990s, the following were most influential: a loss in foreign exchange reserves, high real interest rates, low output growth, decline in stock prices, and deterioration of loan quality (ratio of monitored to total loans or the ratio of monitored banks to total bank population) and equity and high inflation rates.

According to the IMF (2007), the financial system - albeit closely monitored by the monetary authorities - remains exposed to the risk of shocks. The debt stock continues to have the strongest influence on this risk level due to its high sensitivity to interest rate and exchange rate movements.<sup>47</sup> However, it is safe to say that the monetary authorities have made progress in achieving greater macroeconomic stability over the last fiscal year: more jobs have been created since 2002, the foreign exchange market experienced fluctuations in the third to fourth quarter of 2007 but promises to regain stability in the periods ahead, external accounts improved marginally and there was growth in capital receipts. Furthermore, international reserves

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<sup>45</sup> See, International Monetary Fund , Financial System Stability Assessment Report (Washington, DC: 2006)

<sup>46</sup> Kaminsky, Graciela and Carmen M. Reinhart (March 1996), "The Twin Crises: The Causes of Banking and Balance of Payments Problems," International Financial Discussion Paper No. 544 (Washington:Board of Governors of the Federal Reserve System) and Demirgüç-Kunt, Asli and Enrica Detragiache (1998). "The Determinants of Banking Crises in Developing and Developed Countries," International Monetary Fund – Staff Paper, Vol. (45), No. (1).

<sup>47</sup> It must be noted however that over the fourth quarter of 2007 inflation rates climbed to 14 percent, the fiscal balance deteriorated and there has been further depreciation of the exchange rate.

are more than 20 weeks of imports, FDI accounts for more than 17% of GDP, real interest rates are low, the foreign debt stock has a longer maturity profile in excess of 10 years for more than 50% of outstanding foreign debt, and the banking sector exceeds the minimal global risk requirements such as capital adequacy and loan default ratio. All this has improved the resilience of the economy to shocks compared with the mid 1990's financial crises. These signs never existed prior to the previous financial meltdown (IMF 2007). The ingredients for a financial sector collapse of the magnitude of the mid-1990's simply do not exist today, despite the existence of other forms of economic vulnerabilities currently affecting the economy.

This resilience was further tested by the use of a baseline econometric model which tracked the potential impact of a sudden outflow of IIS funds on production, exchange rates, interest rates, remittances outflow and inflation. Using the natural logarithm of monthly data for 16 periods<sup>48</sup> we applied a Vector Auto-regression model. Though these results were not as strong as anticipated, they show that an unexpected change in IIS encashment/outflow from local financial institutions could be associated with a two-month change in the other variables (See appendix 2). That is, a sudden outflow of IIS funds could cause output and inflation to decrease, while interest rates are expected to increase over a two-month period. After this, the impact might dissipate into insignificance.

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<sup>48</sup> This is due to limited data on encashment to these schemes – most financial entities started monitoring inflow and outflow of funds to these schemes over this period.

## **VII. CONCLUSIONS AND RECOMMENDATIONS**

Nearly all investors in these schemes appear to accept that these are high-risk schemes but most do not believe a failure is imminent. Contrary to popular perception, the IIS are not popular with poor Jamaicans but are apparently being used more by professionals, many of whom are in positions to know about the schemes' viability. Most believe that when collapse occurs, they will lose any money they have in the schemes; and hardly any expect the government to bail them out.

Most Jamaicans have leveraged their involvement in IIS and will actually be in a position to absorb a blow in the event of a collapse. Only a relatively small number of investors appear to have used their life savings; meanwhile only 14 percent have sold assets to get involved, which mean that an early collapse might not have the harsh socio-economic consequences feared. Moreover, there is little evidence of a looming widespread social crisis, as the more likely impact will be micro or individual; most investors are willing to lose --they know the risks but invest anyway -- and can afford to lose, which is to say they are mostly middle class. From a qualitative perspective, the biggest losers will be those who use loans from associations, banks or friends and family members since they might end up paying twice. But with most investors depositing their own savings or salaries, the impact would be restrained since they would not be indebted to anyone, i.e. they would lose only once.

The financial community is integrally affected by the operations of these schemes. It has given loans to a fifth of these investors and could face volatilities in the accounts held by these schemes. This outcome is however significantly obstructed since only a little less than 5 percent of the loan stock has been affected by these operations.<sup>49</sup> On the other hand, investors display a willingness to reinvest the returns in the formal financial system, particularly the banking sector, which means that there should not be any significant damage to the client base.

The economic effect of a collapse of these schemes would be only short-term and would likely be constrained due to the build-up of economic resilience within the economy since the mid-1990s.<sup>50</sup> We can expect changes in consumption and production levels as a result of a sudden outflow of funds by these schemes but this shock is expected to last for only a few months. The survey results revealed a degree of risk to the banking community, but these are mainly associated with those loans that are being used as deposits to these schemes – roughly a fifth of the investors.<sup>51</sup>

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<sup>49</sup> This information was provided during a confidential interview with a financial analyst.

<sup>50</sup> This outcome is similar to Albania's.

<sup>51</sup> It is however difficult to determine the extent of this exposure since adequate information on the accounts of the financial institutions was not available.

Accordingly, we make the following recommendations:

- The government should not offer any kind of bail-out or rescue package to investors or firms which lose money as a result of a collapse of any informal investment scheme; and it should make this point clearly and consistently. Given the resilience of both the economy and the financial sector, not to mention the risks to future economic activity that would be caused by a bail-out (moral hazard, an increase in debt with all its attendant effects), there is no persuasive economic argument for a bail-out. Moreover, given the unlikelihood of systemic social unrest or of widespread suffering by society's most vulnerable citizens, there is not even a compelling political argument for a bail-out.
- The appropriate policy response to the emergence and proliferation of such schemes is for the regulatory authorities to prod them into formalisation, as is currently being done. Inevitably, this will winnow out firms which are unproductive, hastening their collapse. But since these firms would have collapsed anyhow, it would be irresponsible for the authorities to permit them to expand their operations, since this would only make the eventual collapse more painful.
- It is not within the remit of banks or other private entities to hasten the collapse of informal investment schemes. Their only role should be to facilitate, when asked, the efforts of the regulatory authorities to formalise these entities. There appears to be little social benefit to the sort of "private regulation" of which some banks have recently been accused.

## **Appendix 1**

After the international recession of the mid-1970s and the domestic contraction, the Jamaican economy went into a period of stabilization. This began in the 1980s and further advanced in the 1990's when there was a period of liberalization.<sup>52</sup> Liberalization took place in the market-determined interest rate and foreign exchange market. There was also the effect of the lower borrowing requirement, while in 1995 Jamaica ended 18 years of borrowing with the International Monetary Fund. The economic environment was also an inflationary one, which resulted in quick growth in profitability and therefore masked the shortcomings of the financial system.<sup>53</sup>

The country now had a financial sector that was rapidly expanding and a sector that wanted to take advantage of the increased volatility in interest rates. In doing so, poor decisions and poor strategic planning in an environment with low savings, increased borrowing and rising interest rates, resulted in a high level of illiquidity in many financial institutions. The result of all this was a financial sector crisis in the mid-1990s which placed significant pressure on the government to redeem the country's financial sector. The government, however, did not turn back to the IMF, for help but instead received financing from other entities such as the IDB and World Bank and issued bonds as another means of financing.

In its effort to rectify the situation, the government of Jamaica nationalized a number of financial institutions. In so doing, FINSAC was established in 1997 to handle the 172 financial institutions taken over by the government. The crisis was since resolved with the closure, merger and sale of these troubled financial institutions. The impact of this on the economy and the financial system has been a significant decline in the number of these institutions since the time of the crisis and a sector that is largely owned by foreign companies. The end result of these changes has been a stronger financial sector.

Jamaica's 1995-1997 financial sector crisis led to a decade-long initiative by local regulators to strengthen the regulatory capacity of the country's financial system. Through these efforts restoration was eventually achieved as many financial players were able to meet their obligations to their creditors. Nevertheless, Jamaica currently pays a high price for those corrective measures by the government, in the form of the overwhelming size of the sovereign debt stock.

### The Jamaican Financial System

The Jamaican financial system comprises commercial banks, merchant banks, building societies, life and non-life insurance companies, credit unions, unit trusts,

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<sup>52</sup> [http://www.jis.gov.jm/gov\\_ja/economy.asp](http://www.jis.gov.jm/gov_ja/economy.asp)

<sup>53</sup> Stated in a speech by Patrick Hylton entitled "An Examination of the Performance of Directors in the Development of the Financial Sector."

financial houses, securities firms and pension funds. As noted in the International Monetary Fund Report, *Jamaica: Financial System Stability Assessment*, there has been consolidation within the Jamaican financial system over the past decade. The number of commercial banks declined from 11 in 1995 to 6 by 2004 and the number of credit unions has declined from 82 in 1995 to 50 in 2004 with a further fall to 48 by 2007. This trend has been observed for the entire financial sector. Only the securities sector has seen growth, with the number of firms rising from 30 in 2004 to 58 at present. These changes indicate the effects of the financial sector crisis and the re-shaping of the financial system (see Table 1).

Conglomerates dominate the Jamaican financial system, linking financial institutions across different areas of the sector and thus demanding special regulatory attention. This has been done through the establishment of the Financial Regulatory Council in 2001, set up as a policy-setting agency responsible for providing information on dually-supervised institutions and for identifying existing supervisory gaps.<sup>54</sup>

*Table 1: The Composition of the Jamaican Financial System, 1995-2007*

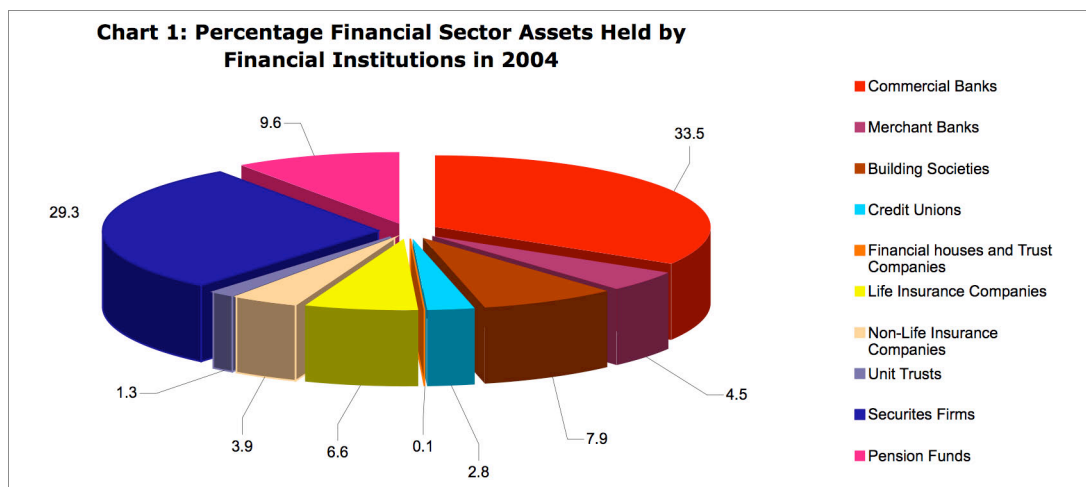
	1995	2000	2004	2007
Commercial Banks	11	6	6	6
Building Societies	32	5	4	4
Merchant Banks	25	14	5	4
Life Insurance	12	8	7	6
Non-Life Insurance	...	17	13	12
Securities Firms	...	...	30	58
Unit Trusts	...	...	10	4
Credit Unions	82	60	50	58

Source: 1995-2004 data obtained from the IMF report *Jamaica: Financial System Assessment* and 2007 data received from the relevant regulatory bodies.

As seen in the IMF report *Jamaica: Financial System Assessment*, an examination of the financial sector asset-holdings of each type of financial institutions in 2004 revealed that commercial banks owned the largest share of the overall market at 33.5%

<sup>54</sup> JDIC Library Online. "Regulatory convergence- A Must for Financial Sector Safety"

while securities firms were the largest holders among the non-bank institutions at 23.9%.<sup>55</sup> The percentage share among the remaining financial institutions is illustrated in Chart 1.



Source: IMF report [Jamaica: Financial System Assessment](#)

Jamaica's regulatory system is now considered to have met international standard. Deposit-taking financial institutions such as commercial banks, building societies and merchant banks are regulated by the Bank of Jamaica and are subject to legislative acts that are enforced by the central bank. The Financial Services Commission was established in August 2001, replacing the Office of Superintendent of Insurance and the Unit Trust and the Securities Commission, and was given the mandate to regulate non-bank financial institutions. The latter include insurance companies, securities firms, pension funds and unit trusts. Credit unions, on the other hand, are self-regulated, in that the regulations are enforced by the Credit Union League of Jamaica. It is now -and has been for some time- the intention to register credit unions as one of the Bank of Jamaica's regulated institutions. This initiative has not been finalised but remains a work in progress.

There are presently six commercial banks in Jamaica, all of which belong to financial groups and five of which are foreign-owned. These five foreign-owned commercial banks represent the vast majority of the financial sector asset share of commercial banks, with one of the front runners, National Commercial Bank, having been sold out to the Canadian company, Advantage Investment Council (AIC) in 2002. Securities firms dominate the non-bank financial sector (measured by share of total assets). Insurance companies are, however, a major competitor in the sector with premium receipts being among the highest in the region.

The Bank of Jamaica Financial Stability Report 2006 records an increase in the demand for loans in 2006. In addition to the increase in loans, there was an increase in

<sup>55</sup> The report notes that assets are defined as net of provision for losses which is consistent with International Financial Reporting Standards.

the asset base of deposit-taking financial institutions by 16.3% (compared to a 6% increase in 2005). The larger portion of this growth was experienced by commercial banks, where loan portfolio assets grew by 17.3% in 2006 compared to 6.7% growth in 2005. Other deposit-taking financial institutions, namely credit unions, building societies and merchant banks, also recorded growth in their asset base of 18.4%, 18.3% and 3.2% respectively. Though there has been a marked increase in loans to households, there has been a reduction in the occurrence of non-performing loans.

Unlike deposit-taking institutions, the increase in assets of non-bank financial institutions in 2006 was similar to that which was experienced in the previous year at 14.6%. The larger share of this growth was held by securities firms, reflecting an increasingly investment-friendly environment. The Bank of Jamaica reports that securities dealers' funds under management increased to 64.2% of GDP in 2006 from 62.5% of GDP in 2005, exceeding commercial bank deposits.

The equities market has been performing well in recent times. At the close of trade on October 17, 2006 saw the Jamaican stock market out-performing many in the region. During this time the Bank of Jamaica embarked on a strategy to reduce interest rates. This affected the financial sector as there was a consequent need for these institutions to reorganise strategies so as to attain increased profit levels. With this came the increased occurrences of acquisitions, with a number of institutions buying into one another. These were the companies that attracted a lot of investors with Jamaica Producers and Bank of Nova Scotia together attracting 50% of all investors in this period. Also in this trading period there were more winners than losers at 18 to 9 all contributing to the favourable performance of the Jamaican equities market.<sup>56</sup>

### Regional Activity

Regional investment has increased over the past 10 years, most of it going into the financial sector. Jamaica is among the major recipients of investments from the CARICOM's largest investor, Trinidad and Tobago. The bulk of these investments go into the banking and insurance sectors. This has been beneficial to the Jamaican economy and the financial services sector. Between 1999 and 2001, US\$ 200 million was invested in the Jamaican economy by investors from Trinidad and Tobago and Barbados.<sup>57</sup> This was instrumental to the recuperation of the Jamaican financial sector from the financial sector crisis and has helped the sector to measure up to the rest of the region.

Countries in the region not only affect the Jamaican financial sector through investment, but also through ownership of some financial institutions in the country. Some of these companies include RBTT Bank which is owned by a Trinidadian company

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<sup>56</sup> All information and statistics on the Jamaican Equities market was received from the Stock Market Weekly by Chereilyn Elbourne.

<sup>57</sup> Caribbean Trade and Investment Report 2005: Corporate Integration and Cross-Border Development "Regional Integration in the Non-Financial Sector - Current Trends and Future Prospects Chap. V", Caribbean Community Secretariat, Ian Randle, 2006.

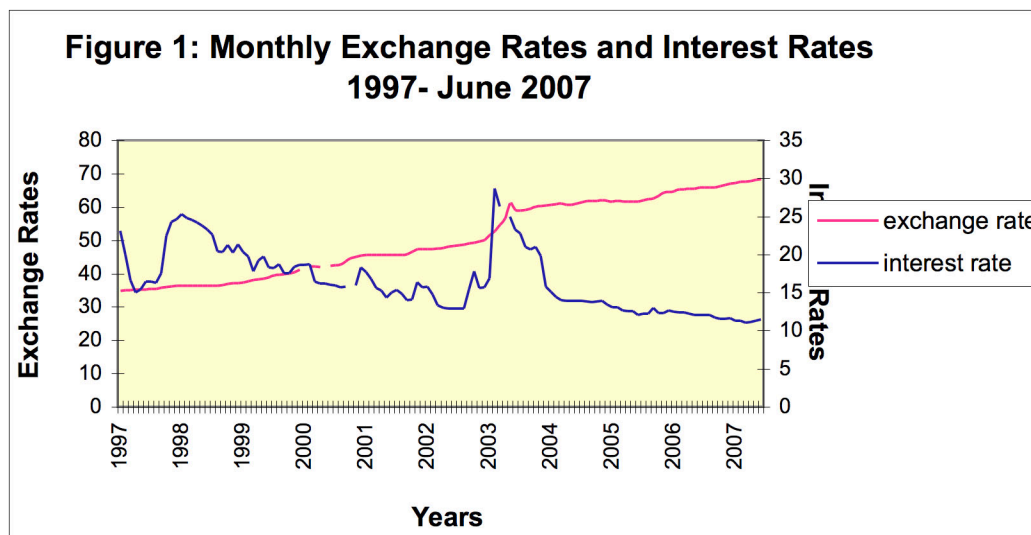


and the National Commercial Bank, which is owned by the Canadian company AIC in Barbados. The existence of conglomerates has had a regional effect with some effort at regulatory evasion through region-wide operations. Suggestions have been made by the IMF as to how such evasions can be prevented.<sup>58</sup>

Macroeconomic Conditions

The Jamaican financial system is operating in an environment of high public debt, much of which has stemmed from the financial sector crisis and low economic growth. This could be considerably detrimental to the financial system, particularly in the case of securities firms, in that high debt creates a risky financial environment. A public debt of about 140% of GDP<sup>59</sup> creates the possibility of high volatility in interest rates and exchange rates, concomitant with any economic disturbances. This may then provide some explanation as to the capricious movement in these two macroeconomic variables in the past decade.

Over the past 11 years exchange rates and interest rate have shown much volatility. The sporadic movement of interest rates and the constant depreciation of the dollar are illustrated in figure 1 (the graph expresses the Jamaican dollar against its US counterpart).

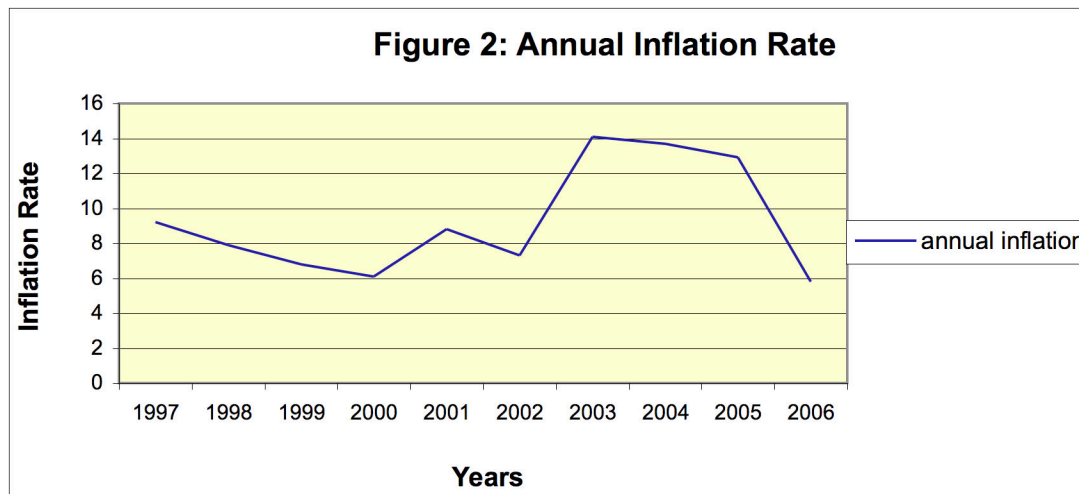


Source: [www.boj.org.jm](http://www.boj.org.jm)

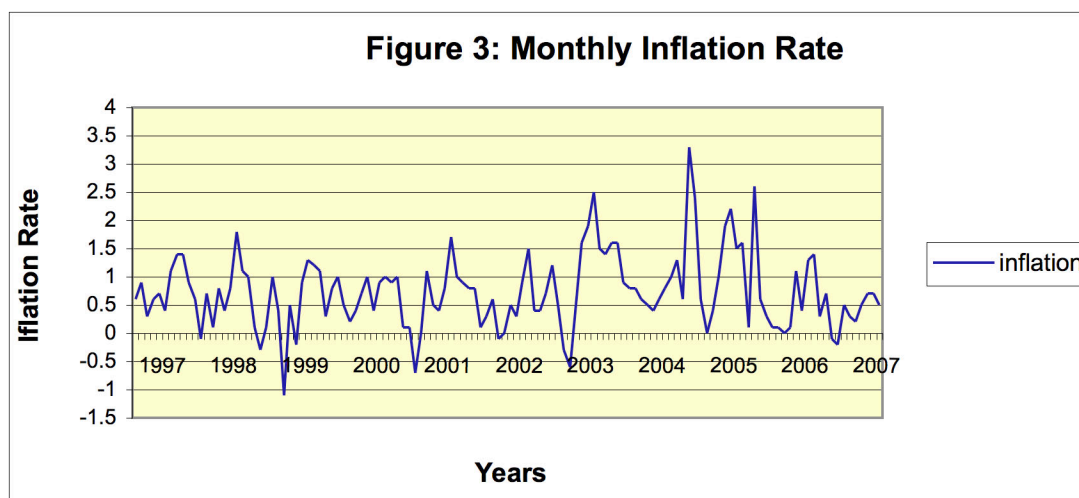
<sup>58</sup> As was published in the *Gleaner* (Kingston) on Friday, March 9, 2007 "International Monetary Fund officials have suggested that Caribbean countries collaborate more on financial sector regulation to detect cross-border evasions and head off potential financial contagion in a region where financial conglomerates are increasingly operating across markets."

<sup>59</sup> Dr. Omar Davies, "2006/ 2007 Budget Closing Presentation", Ministry of Finance, May 10, 2006.

On the other hand inflation has been kept generally low over the 11-year span, though it went into double figures between 2003 and 2005. There was however a subsequent fall to its lowest level in 2006 at 5.8%. In examining the inflation rate within each year much more volatility has been observed, with general price levels changing from month to month. This is illustrated in figures 2 and 3.



Source: Bank of Jamaica Statistical Digest



Source: Bank of Jamaica Statistical Digest

The increase in hurricane activity further increases the economic vulnerability of the Jamaican environment. This effect may be greater for insurance companies as the instances of damage compensation become more frequent. In spite of the risks, economic conditions were particularly favourable in 2006. According to the Bank of Jamaica Financial Report (2006), the favourable nature of the financial environment of this period was largely due to the absence of (or resilience in the face of) exogenous shocks, positive macroeconomic developments and the sharp decline in the inflation rate that occurred in that year (inflation dropped from 12.9 in 2005 to 5.8 in 2006). The reduction in the inflation rate facilitated a decrease in the interest rate of open market instruments. In the face of a decline in the market-determined interest rates, there was a notable increase in the demand for loans by households resulting in an increase in the commercial banks' weighted-average loan rate in 2006. This, along with the banks gearing funds towards core business activities, resulted in a high asset growth rate.

## Appendix 2

A Vector Autoregressive model was used to look at the impact of outflow on the variables exchange rate, interest rate, inflation, production and remittance outflow. This effect was examined over a 16 month periods. All variables, with the exception of interest rate, were expressed as logarithms and all variables were tested at first difference. To assess the validity of the model, the significance of the variables were tested at the 5% level of significance.

### Vector Autoregression Estimates

Date: 12/23/07 Time: 14:03

Sample (adjusted): 2006M06 2007M07

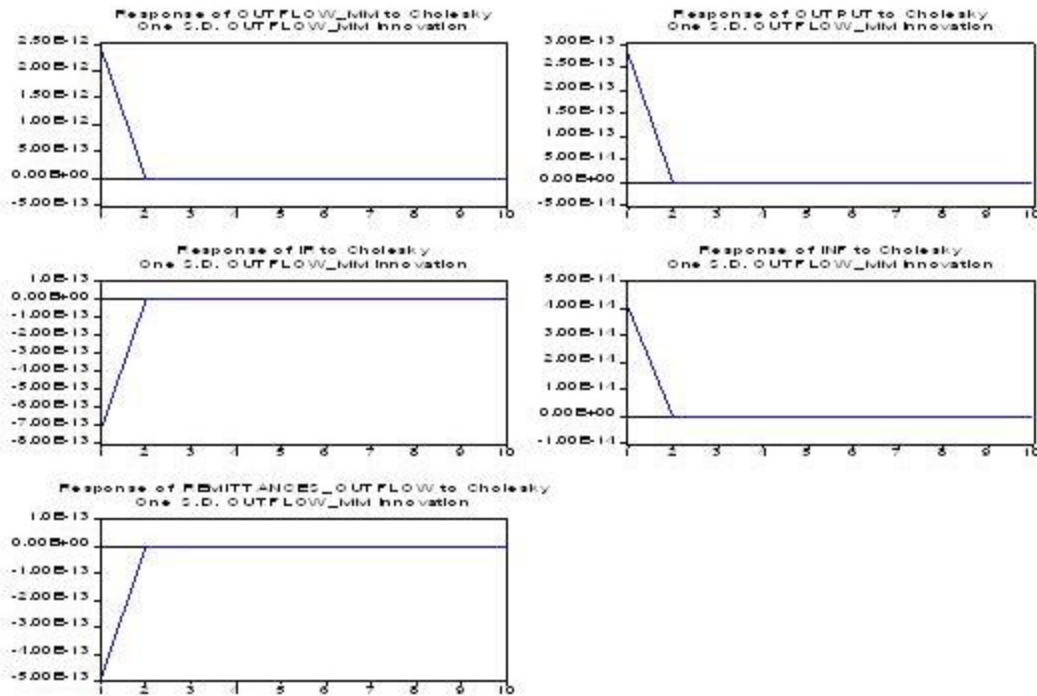
Included observations: 12 after adjustments

Standard errors in ( ) & t-statistics in [ ]

	OUTFLOW_MM
OUTFLOW_MM(-1)	-2.03E-13 (5.7E-13) [-0.35817]
OUTFLOW_MM(-2)	4.99E-13 (5.5E-13) [ 0.91278]
C	2.91E-11 (1.4E-10) [ 0.21129]
OUTFLOW_MM	1.000000 (5.8E-13) [ 1.7e+12]
EX_RATES	-1.28E-11 (3.5E-11) [-0.37011]
INF	-4.25E-13 (5.1E-13)

		[-0.84036]
	IR	1.01E-12
		(6.4E-13)
		[ 1.57845]
	REMITTANCES_OUTFLOW	1.45E-12
		(2.5E-12)
		[ 0.57428]
	OUTPUT	0.000000
		(9.8E-13)
		[ 0.00000]
<hr/>		
R-squared		1.000000
Adj. R-squared		1.000000
Sum sq. Resids		1.07E-24
S.E. equation		5.97E-13
F-statistic		3.49E+24
Log likelihood		
Akaike AIC		
Schwarz SC		
Mean dependent		18.87062
S.D. dependent		0.951533
<hr/>		

The Impulse Response Function was used to map out the time path of various shocks on the variables. Despite the limitations of the model, mainly due to the lack of sufficient data points, an intuitive interpretation of the results from the impulse response function suggest only short-term movements in key macroeconomic variables in the event of a sudden outflow of funds to these schemes.



## Appendix 3

Approximately how much money (in Jamaican dollars) have you invested in this/these or other investment entities?	Reinvest in a Similar AIS (Frequency)	Other uses of returns (Frequency)	Total (Frequency)
UNDER \$100,000	7	21	<b>28</b>
\$100,001 TO \$200,000	30	116	<b>146</b>
\$200,001 TO \$300,000	13	43	<b>56</b>
\$300,001 TO \$400,000	7	31	<b>38</b>
\$400,001 TO \$500,000	7	18	<b>25</b>
\$500,001 TO \$600,000	5	9	<b>14</b>
\$600,001 TO \$700,000	1	7	<b>8</b>
\$700,001 TO \$800,000	3	6	<b>9</b>
\$800,001 TO \$900,000	3	2	<b>5</b>
\$900,001 TO \$1,000,000	4	4	<b>8</b>
\$1,000,001 TO \$1,200,000	5	4	<b>9</b>
\$1,200,001 TO \$1,400,000	0	2	<b>2</b>
\$1,400,001 TO \$1,600,000	3	0	<b>3</b>
\$1,600,001 TO \$1,800,000	1	0	<b>1</b>
\$1,800,001 TO \$2,000,000	3	0	<b>3</b>
\$2,000,001 TO \$2,500,000	1	0	<b>1</b>
\$2,500,001 TO \$3,000,000	1	0	<b>1</b>
\$3,500,001 TO \$5,000,000	0	1	<b>1</b>
\$5,000,001 TO \$10,000,00	1	1	<b>2</b>
\$10,000,001 TO \$20,000,000	0	1	<b>1</b>
\$30,000,001 TO \$50,000,000	1	1	<b>2</b>
\$50,000,001 TO \$100,000,000	1	0	<b>1</b>
MORE THAN \$100,000,000	1	2	<b>3</b>
MY LIFE'S SAVINGS (ALL OF MY SAVINGS)	5	1	<b>6</b>
<b>Total</b>	<b>103</b>	<b>270</b>	<b>373</b>

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