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EQUITY MARKETS AND FINANCIAL SERVICES IN THE CARIBBEAN: SOME INSTITUTIONAL IMPERATIVES

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ABSTRACT:

This paper is essentially a methodological analysis of the imperatives that are necessary to understand what it will take to interface equity market and financial services in the Commonwealth Caribbean such that the capital of these markets and services are made more widely available to a larger cross-section of the people. This paper will highlight some of the internal dynamics as they pertain to risk-reward profile of individuals who are equity persons versus those who are other financial-oriented persons. Finally, a case will be made to narrow the gap between perception and reality as equity and other financial alternatives are concerned. In narrowing this gap, there will be a wider involvement of persons in the equity/capital goods sector of the economies of the region.

IEQUITY AND MARKET AND FINANCIAL MARKETS IN THE COMMONWEALTH CARIBBEAN: SOME INSTITUTIONAL IMPERATIVES

INTRODUCTION:

Over the last five years, 1990-1995, there has developed in some sectors in the Commonwealth Caribbean a heightened interest in equity and financial services markets. The Commonwealth Caribbean region is best perceived as an emerging market. Some persons see this nature of the market as an excellent example of an area than can attract money market funds, stock/equity capital inflows, among other direct investments. The region is not yet overflowing with portfolios assets. However, at the international level, the evidence indicates that "debt and equity securities have...become important investment vehicles" in emerging countries [Chahal, et al., 1996:1]. Furthermore, notes Chahal (1996:2) "capitalization of emerging markets sovereign debt has grown from US\$50 billion to US\$1.2 trillion over the period 1989 to 1993."

A number of studies are now available which focus on: (1) the growth of emerging capital markets as they pertain to the speed with which the markets integrate into the larger, more developed, equity markets; (2) the pricing structure of equities in those markets and (3) institutional rigidities in penetrating emerging markets.

Bonser-Neal, et al., (1990) examined the depth of liberalization of investment restrictions in country funds premia. Bekaert and Urias (1994) analyzed the benefits of investing in closed-end country funds, and the diversification benefits derivable therefrom. Bekaert and Harvey (1995) analyzed the risks associated with integrating in emerging markets over time. Harvey (1995) evaluated potential benefits derivable from investing in equities in emerging markets. Chahal et al., (1996) examined the integration between emerging markets and USA markets with a view of identifying the interaction.

A great deal of the work, heretofore, focused on emerging markets within country and with other financial portfolios but they did not consider social nuances and mores as they may impact on equity or as they may be integrated in the psychology of investing in emerging markets.

In this paper we seek to extend the literature on emerging capital markets to consider other financial services as part of the schema of capital mobilization. The thrust will be on four sections and a conclusion. In Section One we invoke a methodological analysis to integrate equity markets and financial markets in a setting that offers a strategy for broadening and deepening the equity and financial markets in the Caribbean.

In Section Two we focus on the the internal dynamics of the risk-reward profile associated with equity and other financial markets. A strategy is put forward for articulating this market in the context of the risk-reward profile; in a sense, the idea here is to see all of the markets on the same playing field of risk-reward.

In Section Three we discuss a rationale for narrowing the gap between perception and reality in the equity and financial markets in the region. The region is considered an emerging market The benefits derivable from such a market should be expanded given the possibility of great rewards in such a market.

Section Four outlines Ten imperatives which ought to be institutionalized, given the fact that equities and financial markets could be widened in the region.

Finally, in the conclusion we offer some views geared to positioning the topic of equity and financial markets in the CARICOM-wide scale as advocated by William Demas (1976) in his chapter "Central Banking and Economic Transformation in CARICOM Country." In his book Essays On Caribbean Integration and Development (1976:104), Demas calls for a need to "radically transform the 'real' structure of the economy by strengthening (the real) structure and making it less externally dependent..." In the sections "Mobilization and Channeling of Domestic Resources" and in "Building Up a National Capital Market" Demas (1976: 111-112) contends that given the narrow focus of commercial banks in the region, it is critical that a secondary equities market be developed CARICOM-wide to mobilize savings in the financial sectors and channel those savings in high priority domestic capital formation areas.

We can reasonably contend that the equity and financial markets in the Caribbean are beyond the embryonic stage from a conceptual point of view. The next step should be to move the market to an information dissemination stage so that the gap between what is and what is known is minimized. Equity and financial markets could have a new level of paramountcy in the development prospects of the Caribbean if the region's growth trajectory permits informational flow vis-a-vis equities and financial services to be utilized by larger numbers of persons.

SECTION ONE: A METHODOLOGICAL ANALYSIS OF EQUITY AND FINANCIAL MARKETS

In this section we define equity markets around the stock exchanges in the Commonwealth Caribbean, namely those in Jamaica, Trinidad and Tobago, Barbados

and the soon-to-be "electronic" stock exchange in St. Kitts, housed at the Eastern Caribbean Cental Bank. In this context we wish to assess the risk-reward associated with the purchases of common stock and preferential stocks. We wish, also, to focus on corporate paper, an instrument that has been in existence in the wider Caribbean for years, prior to the institutionalization of stock exchanges.

Next, we wish to focus on government bonds and securities and or other debt instruments, as opposed to equity. Finally, we will consider in our methodology casino, lottery, lotto, olimpio, *play whe*, partner-hand (sou-sou, box) as the *financials* in the financial market. The rationale here is to highlight that there are some societal means of raising capital that have some seminal risk-reward features that could be considered as we develop answers to the question: why is the equity and financial market in the region so undeveloped?

The thrust of this methodological section is to consider an environmental scan of the equity and financials markets in the Caribbean as encompassing all of the sections of the above-mentioned instruments in equity and debt namely: stocks, bonds, lotto, lottery, partner-hand, *play whe*, etc. Nearly every country in the Caribbean has one or all of these instruments.

Intuitively, when a person invests in the stock market, that person has a profile of risk-reward. The investor could be investing for capital appreciation, capital preservation, current income, income and growth, long-term growth or aggressive growth. These six areas could be collapsed into three areas of capital preservation, capital appreciation and current income.

By capital preservation we mean the scenario where an investor's goal is to preserve capital. In this instance, the risk-reward profile of the investor permits him to accept lower than average returns on his investment, minimal price fluctuations and minimal risk. In the case of capital appreciation, the investor's goal is to maximize capital over a relatively short period of time, namely a day, a week, a month or a year. Long-term, in this scenario, will be five years. Market timing, quick tips, and other market-moving suggestions stimulate the activity of this investor. This investor's profile permits him to to see the greater the reward associated with the greater risk.

Finally, in the case of current income, the investor's goals is to achieve a stable, certain income stream from some set-specific debt or equity portfolio. The investor may subject his portfolio to a minimal level of risk. This risk may only relate to interest rate risk. Interest rate risk is that risk that is associated with interest rate

changes as they affect the value of a portfolio.

On the other branch of our methodological equity-financial tree, we now turn to the debt and other financials (casino, lottery, lotto, *play whe*, partner-hand, etc.). Given the three subsets of risk-rewards delineated above, the financial side can also fall under capital preservation, capital appreciation and current income.

Casino playing, for instance, particularly the lower-level "slot machines," or "one-armed bandits" is nothing more than an attempt of an individual to benefit from capital preservation, capital appreciation and current income. If a person goes to a slot machine and plays \$20, on a machine that has as its highest pay-out, \$1,000, what the person is doing is "investing" with the hope that a return of 5000% is possible. In the normal scheme of things, however, the probability of that person hitting the jackpot is so low, that the jackpot may not be attained in one in a million times. If, however, the person wins \$20, \$100, or some other play, and did not hit the required three 7's on the slot machine, that person would have achieved some of his expectations, namely, some level of capital appreciation, capital preservation and the maintenance of current income. Furthermore, the person would have achieved his or her rewards over a relatively short period of time, maybe ten minutes, an hour or more, depending on the time the person wants to invest in the game. It may be that the electronic timing of the machine was such that the person was lucky.

On the other hand, if the person loses all of his \$20 and more, then capital loss, loss of principal, is the feature he has to contend with. His winning or losing may have to do with the alleged timing of when he went to play the machine. Nobody can say, for sure, that a casino will play at five o'clock on Saturday after many persons have played. The fact that the machines are preset, electronically, to have a certain pay-out, is the fundamental issue at hand. That information is vital. That information should be told to patrons who play casino. In some cases in the region people know, up front, what the pay-out is on lotteries. The same should apply to casino.

In the stock market, there is much ado about timing. There is an old adage, in the equity market, that the only timing that is relevant is *not the timing of the market, but rather the time in the market.* A shrewd, non-additive, casino player will play for a certain time or play a certain amount and will stop playing if he wins or loses. In fact, in instructions on playing slot-machines, it has been said that a winner should put aside 75% of the winnings and play the remaining 25%. When this 25% is lost, the person should stop playing. Since a slot-machine player is playing against very low

odds, playing against electricity, playing against pre-selected odds, it behooves him to know the parameters of his winning or losing. In other words, information about his view of his "investment" should be readily available.

Likewise, a person who plays lottery, lotto, olimpio, *play whe* is seeking capital appreciation, capital preservation and current income. When a person plays one dollar to win \$1 million or \$25 to \$325,000, these high odds should be explained and the pay-out ratios should also be explained. Note, however, like casino, the time frame is short and the rewards are great if "luck" is in your favor. Luck, however, is uncertain. Unless you are going to look at the winning numbers of the lottery over a period of time and observe the pattern of winning numbers, playing the lotto or lottery is pure luck and chance. The lottery says you cannot have a win if you do not have a chance. That is true. To the ordinary person, however, who puts three dollars or twenty-three dollars per week in the lottery, he is betting on faith, hope and luck. One day the ship of luck will sail in his harbor.

Unlike the stock market, the "investment" in lotto, casino, *play whe* all vanish if the investor loses his investment. Capital is not preserved in the loss. Note, however, that there is a similarity here to companies which go bankrupt. Except for those who own preferred shares, the owners of common stock could get nothing or cents on the dollars of their investment. This marginal similarity is an important informational base on which to advice the public that risk and rewards are inherent in both stock and lotto, even though the perceptions may look different.

Finally, in the system of partner hand, suo-suo, box, etc. we have the case of capital preservation with a lag. There is some risk involved; the integrity of the person who holds the purse, the banker, is critical. The lump-sum of money that a person receives when his turn comes up in the cycle is non-interest bearing- no capital appreciation. It is nominal income- because inflation could have involved the purchasing power depending on the nature of the economy. It is forced savings. Partner-hand has been used to source seed capital for businesses to get off the ground. Like the stock market, partner-hand is a mild form of a long-term portfolio where the term-structure is constant given the number of persons in the partner-hand.

In summary, when we consider the equity market (stocks) and the debt (government bonds, corporate bonds), casino, lotto, lottery, bingo, partner-hand, play whe, olimpio, the risk-reward profile collapses around capital appreciation, capital preservation and current income. If this methodological view is acceptable, then why is

it that the equity market is seen as a more sophisticated structure with greater returns than the casino, lotto, lottery and other financial areas?

Section TWO: THE RISK-FACTOR PROFILE OF EQUITY AND FINANCIALS

The Caribbean business environment, like the business environment elsewhere, depends principally on the retained earnings, commercial banks, development banks and corporate paper to get its new and increased capital infusion. The stock markets in the Caribbean are perceived by some as instrumentalities that can generate some of the requisite capital for growth and development in the region. If failure to "Caribbeanise these equity markets would condemn the region to reliance on fragmented and primitive financing institutions and strongly jeopardise future growth" (Courtney Blackman, 19991: 202 in Worrell, et al 1991), then the questions that we need to ask is this. Why are the stock markets so limited in size? Why are other social, institutional and financial arrangements not being tapped to broaden, deepen and develop a greater interface between equity and financial markets?

Courtney Blackman (1991:198-191) is of the view that "A fundamental obstacle (to the deepening of equity markets in CARICOM) is low income."

Furthermore, he notes,

"To explain the slow development of the markets for equities in CARICOM, we must invoke the concept of critical mass. The larger the number of buyers and sellers in the market, the more actively they trade, the greater is the liquidity of the assets being traded and the more willing are investors to enter the market." (Blackman, 1991 p 199).

Blackman (1991:200) also discussed the unfavorable environment for business in the Caribbean and the technical aspects of integration of equity markets in CARICOM. We discussed some of these technical aspects in our paper on Cross-Border Trading in the Caribbean (1994) and in a Caribbean Stock Exchange and the Internet (1995).

A few observations are essential on the Blackman point of view. Blackman (1991:199) notes, firstly, that Karl Bennett's (1988) estimates of capital flight from CARICOM suggests that "given an appropriate *institutional* framework and government policies which inspire confidence in the domestic economy, substantial funds would be available for investment of all types." Bennett's views in the high capital flight is on target and Blackman's subsequent agreement of this reality is commendable. However, we want to suggest that if the institutional framework is pivotal, the critical

mass argument cannot stand. This where we need to invoke the features associated with casino, lottery, lotto, *play whe*, etc.

To appreciate what we think is the crux of the problem, we need to go back to John Maynard Keynes' (1936) chapter 12 in *The General Theory of Employment, Interest and Money.* In that chapter, Keynes discusses the "State of Long-term Expectations" and analyses the stock market. Central to Keynes' analysis is his explanation of the frequently experienced wide fluctuations in the volume of investments. Keynes contends that two issues are paramount in the analysis of investment decisions:

- (a) the limits of knowledge available to agents and
- (b) the institutional context in which entrepreneurs expectations are formulated.

Pratten (1993:10) expounds on these points and notes that in the Keynesian schema, it is "the long-term expectations, the returns expected to accrue as a result of producing new capital equipment, which influence investment..."

Our argument follows this idea of the long-term expectations of investment as underpinning the full capacity of the stock market to develop in the Caribbean. Furthermore, we argue, it is not the lack of critical mass that detracts from development, but a lack of informational inflow vis-a-vis the expectations and the risk-reward profile under which both the equity side and the financial side could be placed. The large numbers of people in the Caribbean who invest in the lotto, the lottery etc., every week, may be different in their income stream from those who invest in the stock market, but the risk-rewards of both sides, that is stock market and financials side are the same.

Information is not readily available to all about the risk-reward profile of the equity markets and the financials market. The perception is that stocks are for the affluent, while lottery, lotto, play whe, etc. are for the not-so-affluent. If it is accepted that both the equity side and the social financing side are nothing more than a function of risk, then the equity-financing interface could be widened. The social financing side, namely the lotto, lottery, play whe, partner-hand side could be meaningfully incorporated as a method of capital development similarly to the stock-market side. Hence people who now invest in the lotto, lottery and so on, could be encouraged to broaden their financial horizon to seek risk-reward in stocks and risk-reward in lotto and initiate whatever action they desire given the information available to them.

In all fundamental respects, both sides of the methodological divide, stock and finances, revolve around dividends and capital gains. Stockholders want to get regular quarterly dividends on their investments. If the economic circumstances dictate, they would want, also, to experience a rise in the price of their stock. The slot machine person, the lottery person, and so on, focus on capital appreciation. They invest a dollar to make one million or twenty million dollars, as the case may be.

All things being equal, the traditional ways of describing peoples' attitudes toward risk are the underlying features that characterize who invests in stocks and who invests or plays the slot machines, the lotto, etc.

People can be *risk-averse*, *risk neutral and risk lovers*. Risk averse persons are those who want more than a a fair odd to accept a bet. This would be like someone who invests in the stock market with a portfolio of "blue-chip" stocks. A risk-neutral person is one who is not concerned with risk. This person is only concerned with the average pay-out. This investor is not concerned if there is a small chance of catastrophic ruin or a small chance of gigantic payoffs. [Fischer and Dornbusch, 1983: 477]. This risk-neutral person would play casino, lotto, *play whe* or one-armed bandit and think nothing of losing. Finally, the risk-lover is a person who thrives on risk. As Fischer and Dornbusch (1983:478) note, this person "pays to have the privilege of taking bets that are stacked against him." Here, too, casino, lottery, lotto, etc. fall in this category.

In the stock market, bankrupt companies fall in the risk-lover category. Many persons in the Caribbean play slot machines, lotto, lottery and so on. In nearly all Caribbean countries there is either a lottery or some variation of a lottery or casino. We believe, therefore, that it is perception about risk, and not critical mass and low income, that prevent the equity-financials markets from widening and deepening.

Two fundamental problems are at the core of this methodological issue of equity and financial markets. The problems are generic in nature and evolve from the manner in which finance markets address *the sorting problems and incentives problems*. In the course of making investments, "firm owners and managers typically know much more about their business than do outsiders, and it is in their interests to accent the positive while downplaying potential difficulties." [Prowse, 1996:2]. In addition to Prowse (1996), Leland and Pyle (1977) and Ross (1997) discuss this issue of sorting, emphasizing in the process that a firm's choice of capital structure is pivotal

in its minimizing problems of sorting. Essentially, what we have here is what the late 1996 co-Nobel Laureate William Vickrey and the current co-Nobel James Mirlees call asymmetric information. Firm managers, casino owners, lotto owners, etc. have a monopoly over some information which they do not pass on freely to the persons who decide to invest in the business or who decide to play lotto, etc.

Then there are incentive problems. These problems develop when, as Jensen and Meckling (1976) and Prowse (1996) note, managers benefit from the knowledge they have at the expense of outsiders. Managers and controllers of the equity and financial structures seek to profit at the investors' expense. Diamond (1991) contends that some managers who think long-term seek to maintain "a good reputation with outside investors (and) have strong incentives no to act opportunistically at the investors' expense." But it should be obvious that this informational flow could be barricaded depending upon the size of the firm. From a stock point of view, the type of business, the reputation of the manager, and the trustworthiness of the people involved are critical to the investor. Here the role of the public sector as watch dog agency is vital.

All in all, informational asymmetries are at the heart of this problem of the perception of stock as less risky that markets for lotto, lottery, play whe and "one-armed bandits." What, therefore, must be done to narrow the gap between the perception that equity markets are safer that investing in casinos, lottery, lotto, play whe? What could be done about the inadequate informational flow? What must be done about asymmetric information in the stock and financials markets such that more people can participate in these markets, but from the point of view of improving their understanding of the capital appreciation such they may get the capital preservation they may anticipate?

SECTION THREE: NARROWING THE PERCEPTION GAP BETWEEN EQUITY AND FINANCIALS

One of the central issues that gives people a skewed impression about the risk-reward between the equity market and other financials, as listed in this paper, is what we term asymmetrical information, as we noted above, following Vickrey and Mirlees. Sellers of stocks and controllers of lottery, and the rest, have more information than buyers. The sellers, therefore, have a decided advantage. The stockbroker, the

stock company, the lotto and lottery controllers have a decided monopoly on the requisite information that would make the player (buyer) more informed about what investment decision to make.

In large and developed stock markets, there is a tendency for institutional fund holders to be involved in momentum trading strategies and *herding behavior*. In the words of Grinblatt, et al. (*American Economic Review*, Dec. 1995: 1104), "mutual funds have a tendency to buy stocks based on their past returns, and they tend to buy and sell the same stocks at the same time (ie herd) in excess of what one would expect from pure chance."

Casino, lotto and lottery players also play base on a herd-type mentality investment. When someone wins a jackpot, when someone wins a lotto, many persons assume that they, too, can win. In the one-armed bandit area, when players hear and see others next to them winning, they, too, conclude that they will win. Seldom do these optimistic people know how much the new winners have spent to get to their winning position. In the one-armed bandit area, some machines are always making noise. The length of the noise indicates the closeness to a jackpot. It should be obvious in the slot market, that past success is no guarantee of future success.

In the slot market arena, there is not players beware sign. Some literature on gambling, for example Ali (1979), Figlewski (1979), Dolbear (1993) and Goodwin (1993), indicates that the knowledge of "final odds fail to provide unbiased predictions of the probability of various outcomes." Furthermore, as Ali (1979), Metzger (1985), Terrell (1994) and Terrell and Farmer (1996: 846) point out, a bias such as the *gambler's fallacy* influences betting patterns. The gambler's fallacy is an incorrect belief that the probability of an event is lowered when the event has recently occurred.

We are of the firm view that the gap between the equity market and the financial, betting type market, is a perception and reality issue. The gap is deeply embedded in the notion that money could be made in the stock market if you have lots of money, and if your a high-money person. On the other hand, lotto, betting persons are viewed as persons who are not as skilled in the probabilities of money and hence have low horizons when it comes to investing. We are of the strong view that if the information pertaining to the probabilities of both sides of the methodological divide was free, clear, and above board, the overall markets for equity and financials betting will expand. In so doing, a region such as the Caribbean where the stock market is just above the nascent stage but where lottery and general betting are deeply embedded in

the social fabric of the people, it may be possible to galvanize a equity/financial scenario that would be revolutionary in financing. Intrinsically, just like stocks, lotto, lottery, and other forms of betting or investing, should have the odds clearly delineated. Success in the pass is no guarantee of success in the future. More people should know more about these games of chance whether they are in the stock market or the one-armed bandit. The odds should be clearly outlined. The playing field should be level. What could be done to set into motion the necessary conditions to mobilize the stock markets in the region and to interface the betting, the casino, the lotto, the lottery, the *play whe*, the partner-hand, such that the region can begin to depend more on its own resources for development? We suggest that there ought to be some institutional imperatives. We offer ten imperatives in the next section.

SECTION FOUR: INSTITUTIONAL IMPERATIVES

The term Institutional Imperatives is used in this paper to mean established laws geared to having an impact that is absolutely necessary, urgent and compelling, to implement certain power and authority to make something work for the good of others.

Thus far we have demonstrated that the equity market (stock) and the financials "market" require that there be a diffusion of information to all concerned. In this regard, therefore, the following imperatives should be institutionalized if the equity-financing markets are to be widened, and if the region is to optimize its benefits from these two markets along the methodological divide as we have detailed in this paper.

- 1. The rules for stock markets and the rules for casino/lotto/lottery should be clearly delineated to all.
- 2. The odds of winning and losing should be clearly pointed to investors or players.¹
- 3. Stock firms should be up front and clear in terms of their data on the nature of the company. This is necessary if there is to be a minimum of asymmetric information between the market maker and the market investor.
- 4. Regional governments need to set up a Regional Securities System to ensure that there is a commonality in the policing of securities so that fraud, corruption, and other possibilities of malfeasance and misfeasance are minimized.
- 5. Slot machines, lotto, and the rest, should fall under a similar regulatory

agency as the stock market to ensure that people are not unfairly encouraged to invest their money without knowing the odds of their winning.

- 6. Where it is known that people are addicted to one form of gambling or the other, whether it is the stock market, casino or lotto, there should be some agency to protect the welfare of the addicts and the welfare of the community at large.
- 7. The statistics of stock markets, lotto, lottery should be absolutely clear in terms of trends in winnings, the psychology of the markets, what moves markets and what expectations are to be in vogue relative to the stock market, the casino, lottery or lotto.
- 8. Investors in the stock market and the slot machines, etc. should be told that the past is not a guarantee to the future. They should be told that casino slot machines have a random-number generating chip.²
- 9. The public at large must be informed that stocks have the same type of risk-reward as lotto, lottery, etc.³
- 10. Finally, the public and private sectors should put in place the necessary institutional arrangements and make a conscious effort to widen and broaden the equity and financials market, as defined over lotto, lottery, play, etc. since in so doing the region would certainly be able to mobilize some more of the requite finances to put the region on a firmer growth trajectory.

CONCLUSION:

This focus in this paper is on an interfacing of the traditional equity market (stock) market in the Caribbean and the non-traditional, financials type of investing. Under this latter category falls lotto, lottery, partner-hand, play whe, olimpio, etc. Many persons from the Caribbean have used partner-hand in England and the USA, among other places, to get the needed seed money to start a business or build a house. We are of the view that a financial arrangement like partner-hand has some merits in terms of a wider Caribbean applicability.

In the USA, according to estimates of Lyle Stuart (1996:13), "More than 90 million people visit casinos each year. ...Casinos are proliferating so fast that it is estimated that by the year 2000, 95% of all Americans will live within a three-hour drive of a (casino)." Michael Haliassos and Carol Bertaut (1995: 1110-1129) in a paper entitled "Why Do So Few Hold Stocks?" showed that in the USA 75% of USA households do not hold stocks despite the equity premium and the predictions of expected-utility models. In the Caribbean, casino and other non-traditional type financing are taking on a momentum of their own. Our contention is that there is a need

to organize these methods of financing and interface them with the traditional equity market. In so doing both markets will be widened. The wider public will benefit and the economies in the region will benefit. It is imperative, however, that the rules of risk and rewards be clearly delineated such that people are not taken to the proverbial cleaners because of shady, fly-by-night traders, lotto dealers or lottery makers.

The managers and investors, lottery players and lottery controllers should be in concert as far as their incentives are concerned. Many regulations should be in place to protect the investors. Regulations may unduly constrain some firms in terms of the collateral, the level information generation, etc. However, it would seem to be better in the long run, from a welfare enhancing point of view, to *minimize asymmetric information*, than to continue to let some people monopolize information at the expense of others. *Mandated disclosures should be a sine qua non for doing business* in lottery, casino, stock market, or lotto. As disclosures become more open and popular, more persons, it would seem, would have a greater tendency to expose themselves to the type of risk profile that they like. The stock market and betting are similar in terms of risk-reward profile. People who put money in both areas should know these characteristics.⁴

Around the Caribbean today, the stock exchanges are making efforts to diffuse more information to the public vis-a-vis the equity market. Recently the *Barbados Advocate* carried and article from the Securities Exchange of Barbados (SEB) where Virginia Mapp, general manager of the SEB, outlined the fine points of the SEB, paying particular attention to the regulatory aspects of the SEB.⁵

In the July 7, 1996 issue of the *Jamaican Sunday Herald*, David Davies, general manger for Financial Control and Planning of Citizen Bank, encouraged Jamaicans to participate in the local and international equities markets. In the same article, Wain Iton, general manager of the Jamaican Stock Exchange outlined the new developments in US dollar-denominated shares of Citizen's Bank preference shares. This, too, as a service of the Jamaica Stock Exchange, bodes well for the kind of information flow of which we discuss in this paper. Rita Humphries Lewin, Chairman of the Jamaica Stock Exchange saw the new preference shares as an opportunity for the public to be more informed about the stock market and the role that equities can play in financing product development.

There are some underlying issues of unease in the stock markets and the

non-traditional financing markets in the Caribbean. Our suggestion to interface them and widen the scope of financing in the region is not as easy as it sounds. However, the complexity of issues is not all related to systemic risks or systemic rewards. The information zone needs to be expanded both in the equity and financials sectors such that random symmetric shocks are minimized, and that negatives associated with lack of information is kept at a minimum. The widening of both the stock market and the non-traditional financing is of central moment. Such a widening could, in a systematic manner, bring those who play *play whe*, lotto, lottery, olimpio, partner-hand, etc. into a financial market that has an internal dynamic for self-financing, long-term capital preservation, and perhaps some long-term capital appreciation.

If, as Demas and Blackman, contend that the equity market can play a central role in the region, we would like to believe that the equity role could be widened if the other forces of savings and investment are marshaled to permit the equity/financing interface to be more readily workable for more persons, more often. The widening of those non-traditional sources of financing are, in some sense, symptomatic of of own resources. A look at three representative days on the Jamaican Stock Market, the Securities Exchange of Barbados and the Trinidad and Tobago Stock Market shows that actively traded stocks are, for the most part, low-priced stocks in US dollar denominations. For example, in Jamaica of 47 stocks on the market, Nineteen were actively traded and they were all below US1.00; 13 or 68% were below US ten cents. In Barbados, of 18 stocks on the Securities Exchange, 6 were actively traded with prices ranging from US1.13 to US3.15. In Trinidad, of 24 stocks on the TT Market, 9 were actively traded with prices ranging from US 28 cents to US2.98. (See Appendix of Graphs for the three markets).

It suggests, therefore, that ordinary, small individuals who play lotto, lottery, etc., could be taught the fundamentals of the market and be encouraged to invest in the stock market, in groups or individually if they wish. In many cases, these ordinary, supposedly low-income persons are betting more on lottery than may be required to invest in a stock.

Lack of knowledge and structural impediments to informational flow, and not lack of capital seems to be the drawback to a wider stock purchasing and stock-holding public. There is clearly a need to have a broad base interface of equity and financials. The more the region can depend on its own resources, all kinds of resources, the better off the region will be in the long run.

FOOTNOTES

- 1. For example, it has been established that there is a one in twenty-two chances that a person will win at slot machine. Other research shows that casinos have a 10% edge in slots. (Stuart, 1995:5).
- 2. Slot machines players, for example, should know that because two sevens played on a previous spin, it does not follow that three sevens will come on a subsequent spin. Likewise, stock market investors should know that because a stock price increased today, it does not mean it will increase tomorrow, or the next day for that matter. What goes up can and does come down.
- 3. Who you are is not important as what you want. Stocks may require a larger downpayment than lottery to ensure a purchase, but it must be pointed out to all that several small amounts of a money could be added up to buy stocks. It could also be pointed out that several persons can combine to buy stocks, just like several persons play lottery in a pooling system. In a word, the regional stock market should be demystified; the regional lotto, lottery market should be highlighted and be given more financial attributes.
- 4. The similarities between betting, gambling, lotto, lottery and the stock market is a highly debated area. Figlewski (1979), for example, compares the bettor's use of market analysis and brokerage houses. Terrell and Farmer (1996)-look at "Optimal Betting and Efficiency in Parimutuel Betting Markets With Information Costs."
- 5. See the general information article "SEB and the Investor," Barbados Advocate, August 15, 1996, p. 16.
- 6. Haliassos and Bertaut (1995: 1126) indicate that their "findings imply that a broad stockholder base requires extensive initial advertising and continuos flow of information to new potential entrants" to the stock market.

REFERENCES

Ali, Mukhtar M. (1977). "Probability and utility estimates for racetrack bettors." *Journal of Political Economy*, vol. 5 (4), pp. 803-15.

Bekaert, G. and C. Harvey (1995), "Time-varying World Market Integration," *Journal of Finance*, no. 50, pp. 403-444.

Bekaert, G. and M. Urias (1994), "Diversification, Integration and Emerging Market Closed-end Funds," Working Paper, Stanford University.

Bennett, Karl (1988), ""External Debt, Capital Flight and Stabilization Policy: The Experiences of Barbados, Guyana, Jamaica and Trinidad and Tobago," *Social and Economic Studies*, vol. 37, no. 4, pp. 57-77.

Bonser-Neal, C., G. Brauer, R. Neal and S. Wheatley (1990), "International Investment Restrictions and Closed-end Country Fund Prices," *Journal of Finance*, no. 45, pp. 523-548.

Chahal, Mandeep S., Michael J. Rebello and Stephen D. Smith (1996), "Emerging Debt and Equity Markets: An Exploratory Investigation of Integration Using Daily Data." Working Paper Series 96-7, Federal Reserve Bank of Atlanta, USA.

Blackman, Courtney (1991), "The Development of Equity Markets in the Caribbean," in Worrell, et al (1991), pp. 190-203

Demas, William G. (1976) Essays on Caribbean Integration and Development, Kingston, Jamaica: Institute of Social and Economic Research.

Diamond, D. W. (1991), "Monitoring and Reputation: The Choice Between Bank Loans and Directly Placed Debt," *Journal of Political Economy*, vol. 99, no. 4, pp. 689-721.

Dolbear, F. Trenery, (1993). "Is racetrack betting on exactas efficient?" *Economica*, vol. 60, pp. 105-11.

Figlewski, Stephen (1970). "Subjective information and market efficiency in a betting market." *Journal of Political Economy*, vol. 87, no. 1, pp. 75-88.

Fischer, Stanley and Rudiger Dornbusch (1983), Economics, New York: McGraw-Hill Book, Company.

Goodwin, Barry in Terrell and Farmer (1996). "Semi-parametric testing of speculative efficiency in a parimutuel gambling market." (mimeo.

Grinblatt, Mark, Sheridan Titman and Russ Wermers (1995), "Momentum Investment Strategies, Portfolio Performance, and Herding: A Study of Mutual Fund Behavior", *The American Economic Review*, vol. 85, no. 5, pp. 1088-1105.

Haliassos, Michael and Carol C. Bertaut (1995). Why Do So Few Hold Stocks?" The Economic Journal, vol. 105, no. 432, pp. 1110-29

Harvey, C. (1995), "predictable Risks and Returns in Emerging Markets," *Review of Financial Studies*, no. 8, pp. 773-816.

Jones-Hendrickson, S. B. (1995). "A Caribbean Stock Exchange and the Internet." *Annual Monetary Studies Conference*, Basseterre, St. Kitts, November 8-11.

Jensen, M. C. and W. H. Meckling (1976), "Theory of the Firm: Managerial Behavoir, Agency Costs and Ownership Structure," *Journal of Financial Economics*, vol. 3, no. 2, pp. 305-60.

Keynes, J. M. (1971-89). *The Collected Writings of J. M. Keynes*, edited by D. E. Moggridge and E. Johnson, London: Macmillan.

Keynes, J. M. (1936). The General Theory of Employment, Interest and Money, reprinted as vol. 7 of the Collected Works.

Leland, H. and D. Pyle (1977), Informational Asymmetries, Financial Structure, and Financial Intermediation,: *Journal of Finance*, vol. 32, no. 2, pp. 371-87.

Metzger, Rebecca S. (1985). "Biases in betting: an application of laboratory findings," *Psychological Reports*, vol. 56, no. 3, pp. 883-8

Pratten, Cliff (1993). The Stock Market. London: Cambridge University Press.

Prowse, Stephen D. (1996), "Corporate Finance In International Perspective: Legal and Regulatory Influences On Financial System Development," *Economic Review*, Third Quarter, Federal Reserve Bank of St. Louis.

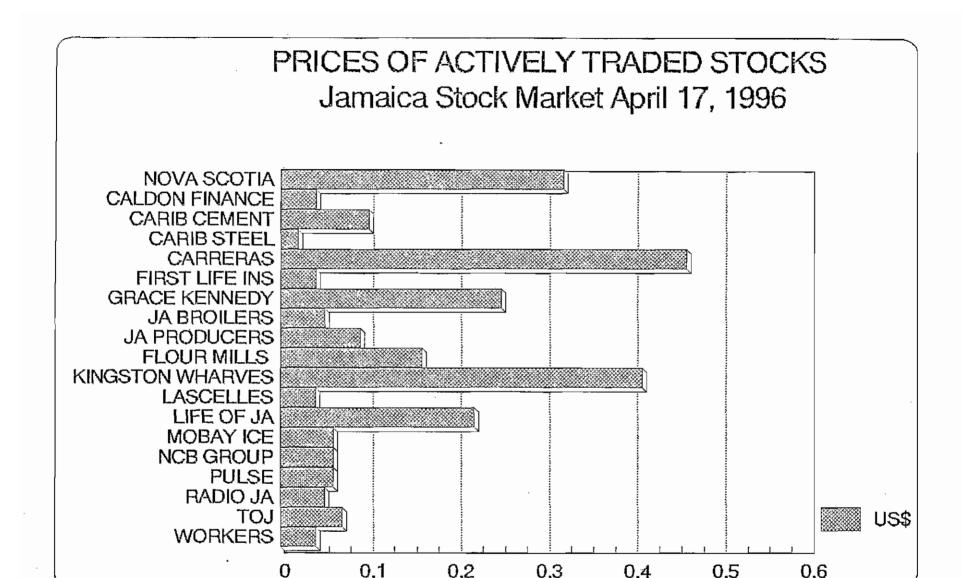
Ross, S. (1977), "the Determination of Financial Structure: The-Signaling Approach," *Bell Journal of Economics*, vol. 8, no. 1, pp. 23-40.

Stuart, Lyle (1995), "What Casinos Don't Want You To Know," Bottom Line Personal, vol. 16, no. 21, pp. 13-14.

Terrell, Dek (1994). "A Test Of The Gambler's Fallacy: Evidence From Parimutuel Games," *Journal of Risk and Uncertainty*, vol. 8, pp. 309-17.

Terrell, Dek and Amy Farmer (1996). "Optimal Betting an Efficiency in Parimutuel Betting Markets with Information Costs," *The Economic Journal*, vol. 106, no. 437, pp. 846-868.

Worrell, Delisle, Compton Bourne and Dinesh Dodhia (1991), Financing Development in the Commonwealth Caribbean, London: Macmillan Caribbean.



Data: Caribbean Week, April-May, 1996

