



## ***Back to basics- Fundamentals of Risk Management***

The past year and a half of financial turmoil starting with the sub-prime crisis leading to the largest financial crisis in US history has taught us many lessons in risk management. It is difficult to determine the role of risk management in the crisis since many of the institutions that found themselves in trouble had well developed risk procedures and systems that allowed for many types of analysis; and models that could have been used to value their products and perform various calculations that they thought would help to protect their portfolios. In spite of all this the financial crisis occurred and literally wiped out the investment bank model that propelled Wall Street for decades. In the Caribbean, the toxic sub-prime investments did not find itself in the portfolios of our banks and financial institutions. Some argued that it was a lack of sophistication of the local markets; I tend to believe that it was really some basic risk management principles that protected our institutions since many local players deal regularly with international brokers and would have been presented with the opportunity to participate in the same investments that caused the problem in the first place.

Let us set aside the fancy models and concepts, which many Wall Street firms embraced, and focus on some basic principles which will once again form the core of risk management going forward. These basic concepts, while simple, need reiteration and can be used by institutions and individuals.

1. Strong fundamental analysis: the local market in particular has traditionally been credit risk oriented due to the presence of a strong banking sector, which created a well developed credit risk framework. Local banks and financial institutions typically go through a rigorous analysis process before granting any loans or making any investments. In the US it was the opposite in the recent past where credit was relatively easy to come by and loans to unqualified individuals was the root cause of the financial crisis. Any analysis should thoroughly assess the sources of risk in any investment. Credit risk, which is most familiar, is an assessment of the ability of an issuer to make their payments or in other words "Will I get my money back?" There can also be other risks such as market risks, which include changes in the price of an asset (like stocks), changes in interest rates, and changes in foreign exchange rates; all of which can have different impacts on investments. These should all be taken into account when making investment decisions.
2. Limit the use of leverage: leverage or lending to buy securities was widely used in the US to boost the profits of many institutions. The way leverage works is that if an investor wants to invest \$10 in an asset they only need to put a portion, say half for example, and a broker would fund the rest of it and hold the asset as collateral. The benefit to the investor is that they would receive the returns on \$10 of the asset even though they would have only put in \$5. The downside is that the investor would have the full risk of the investment as brokers would protect themselves by asking for additional funds (margin calls) if the value of the asset fell. The other major downfall of

leverage was that when the credit market tightened many brokers had to withdraw their funding, forcing investors to sell their assets at the worst time, resulting in large losses. While some leverage is useful, too much can lead to problems if market conditions change as they did in recent times.

3. Avoid complex financial products: One of the main problems with many investors is that they invest in products that they do not fully understand. In spite of this they go ahead with the investment because it sounds fancy or because they simply do not want to admit to not understanding. This is particularly common in the case of the derivatives market where new and complex structures are concocted every day and the true risks are hard to determine. If an investment is too complex or does not feel right then, to be safe, either avoid it or get an explanation or opinion from a reliable and trained third party before making a decision.
4. Set concentration limits: as long as people are willing to invest there will always be the occasional bad investment that will result in losses from time to time. The key to minimize the impact of these is to have various targets or limits in place. These limits would result in portfolio diversification and avoid over-concentration in any particular investment, asset class or entity. This ensures, if an investment or asset class underperforms, that there are other investments in the portfolio that are uncorrelated and would perform well and thereby offset some of the loss. When planning a portfolio always decide on the maximum amount that should be allocated to various assets such as cash, mutual funds, stocks, bonds etc. and stick to these limits. Remember the old saying “don’t put all your eggs in one basket”. Many US financial institutions were over-exposed to sub-prime related investments and would have learnt this lesson the hard way.
5. Avoid investing in unregulated or questionable entities: There are many people who make a career out of deceiving unsuspecting people. There will always be individuals or entities that promote products that offer fantastic returns on investments, some over very short periods of time. If something seems too good to be true it should be investigated properly before investing in it. It would be useful to check whether the entity is regulated and by whom, as regulators would typically ensure that certain standards are maintained in order to protect investors. A quick call to your local regulators, Central Bank or the Securities and Exchange Commission (SEC), would be a good place to start. Always question unusually high rates to determine what is backing the investment. In most cases high rates are associated with high-risk investments so be cautious if the rate being offered is substantially higher than what other institutions are offering for similar products. Also be cautious if you are being rushed to make a decision as this is another sign that would usually raise some red flags.

A recent example of this is Stanford International Bank (SIB) which operated out of Antigua. They were offering rates on US\$ certificates of deposit (CDs) that were substantially higher than competitors' rates. Recently the US SEC announced that SIB was involved in a massive fraud which involved the selling of US\$8 billion of CDs. SIB was not regulated by the Eastern Caribbean Central Bank and their deposits were not insured so investors would stand to lose. Some background checks revealed that SIB was being investigated by the US SEC since last year but the company claimed it was routine checks. The other recent scheme was the US\$50 billion Madoff ponzi scheme, the largest in history. A ponzi scheme is one where investors are paid high returns from fabricated investment strategies but in reality they are really paid from money brought in by new investors. There are no real assets backing the investments and the scheme relies on a flow of new investors to keep it running. In the case of

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Madoff, the significant decline in the financial markets resulted in investors withdrawing their funds and with no new investors to source the funds the scheme collapsed. His firm was also investigated a number of times over the years. Madoff was a key player in the US financial markets and knew the system and his clients very well which enabled him to perpetuate the scheme for so long.

6. Prepare for the worst: In finance the fancy term for this is stress testing. What this means is that worst case scenarios are formulated, the potential impact assessed, and contingency plans or hedging strategies are put in place in the event that any of the scenarios should occur. Stress testing is an old concept that has been used by many institutions to supplement their routine market risk analysis, however, events of recent times will redefine the way stress tests are done going forward. Institutions which never did stress testing before would realize its importance in uncovering hidden risks or identifying the interactions among different risk types. For individuals, stress testing is done constantly at a personal level as many individuals have a certain amount of savings set aside in case of an emergency or change of jobs etc. Stress testing can also be done on individual portfolios in order to plan hedging strategies, portfolio rebalancing or asset allocation.

The pointers above are some 'back to basics' tips that can be used when making new investments or analyzing existing ones. Even though risk management can become highly technical and calculation-centric, which at times is necessary, these are some basic concepts that will always be at the core of proper risk assessment.

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## FINANCIAL & ECONOMIC INDICATORS

As at 26 February, 2009

| <u>Exchange Rate/US\$</u> | <u>Closing Value</u> | <u>Previous Week</u> |
|---------------------------|----------------------|----------------------|
| Yen                       | 97.92                | 94.20                |
| Euro                      | 1.27                 | 1.27                 |
| Jamaica                   | 88.18                | 88.30                |
| Guyana                    | 205.50               | 204.90               |

| <u>Commodity Prices</u>  | <u>Closing Value</u> | <u>Previous Week</u> |
|--------------------------|----------------------|----------------------|
| Crude oil (US\$/bbl)     | 45.22                | 39.48                |
| Natural Gas (US\$/mmbtu) | 4.07                 | 4.45                 |
| Gold (US\$/Troy Ounce)   | 946.20               | 974.65               |

### Eurobond Indices (As at 26-February-09)

|   |       |
|---|-------|
| Lehman Brothers Global Aggregate Index (Return % YTD)               | -5.32 |
| JP Morgan EMBI+ (Basis points)                                      | 647   |
| JP Morgan Central America and Caribbean Index (CACI) (YTD return %) | 4.34  |

| <u>Policy Interest Rates (%)</u> | <u>Closing Value</u> | <u>Previous Week</u> |
|----------------------------------|----------------------|----------------------|
| United States                    | 0-0.25               | 0-0.25               |
| Euro Zone                        | 2.00                 | 2.00                 |
| Japan                            | 0.10                 | 0.10                 |
| Brazil                           | 12.75                | 12.75                |
| Trinidad                         | 8.75                 | 8.75                 |
| Jamaica                          | 13.50                | 13.50                |
| Barbados                         | 3.00                 | 3.00                 |

| <u>Market Interest Rates (%)</u> | <u>Closing Value</u> | <u>Previous Week</u> |
|----------------------------------|----------------------|----------------------|
| US 90-day T-Bill                 | 0.27                 | 0.30                 |
| US 10-Yr Treasury                | 2.99                 | 2.85                 |
| 3-month UK Libor                 | 2.06                 | 2.07                 |
| Japan 90-day T-Bill              | 0.38                 | 0.37                 |
| Brazil 90-day T-Bill             | 12.05                | 12.26                |
| TT 90-day T-Bill                 | 4.11                 | 4.42                 |
| Jamaica 90-day T-Bill            | 22.33                | 22.33                |
| Barbados 90-day T-Bill           | 3.84                 | 4.10                 |

Sources: Bloomberg, CMMB, Central Bank of Trinidad and Tobago, Bank of Jamaica, Central Bank of Barbados, [www.lehman.com](http://www.lehman.com)

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