

Volatility

Volatility is a significant form of risk measurement. It is usually measured by calculating the standard deviation which is actually a dispersion measure. Of course, the greater the dispersion, the greater the risk. Though some scholars consider this volatility measurement imperfect as upside movements are considered just as risky as downside movements, I believe that this measurement is fair as irrational exuberance can be seen as volatility. Hence, for my analysis I have selected a three year period in which the market in general experienced both upward and downward swings; July 2003 to June 2006. The analysis was done on the week to week stock price changes of four sectors.

The annualized volatility was done by first calculating the weekly continuous compounded returns for the three year period. The standard deviation of these returns was then calculated and annualized by multiplying by the square root of 52 (52 weeks in a year).

Table 1

Banking Sector	Annualized Volatility
First Caribbean International Bank	11.33%
National Commercial Bank (Jamaica)	26.89%
RBTT	19.64%
Republic	11.25%
Scotiabank	12.91%

As can be seen from Table 1, the most volatile of the stocks in the Banking Sector was National Commercial Bank (Jamaica) (NCBJ) with an annualized volatility of 26.89 per cent. This is because this Bank was subject to the instabilities that were experienced in its home market. Only recently has there been some stability in that country. RBTT followed being the most liquid and therefore the most easily traded of the remaining Banking stocks. The remaining shares experienced between 11 to 13 per cent volatility. The Non-Banking/Finance Sector however paints a much different picture.

Table 2

Non-Banking/Finance Sector	Annualized Volatility
Ansa Merchant Bank	13.00%
Capital & Credit Merchant Bank	37.94%
Dehring, Bunting & Golding	22.89%
Guardian Holdings	30.53%
Jamaica Money Market Brokers	32.48%
National Enterprises Limited	29.07%
Sagikor	29.03%

From Table 2, it is evident that Companies in the Non-Banking/Finance Sector are prone to much more volatility than that of the Banking Sector. The dispersion was as great as 37.94 per cent (Capital & Credit Merchant Bank (CCMB)) with the majority of values over 30 per cent. Shares such as CCMB, Dehring, Bunting & Golding (DBG) and Jamaica Money Market Brokers (JMMB) are generally less stable because of the instability associated with the Jamaican economy as mentioned before. This instability

sometimes results in investors taking positions and selling off their shares once their goal has been achieved. Actions such as this add to the volatility of the share.

Another member of this Sector, Guardian Holdings (GHL) also has a high volatility in part due to accounting treatment of its equity portfolio. In accordance with IAS 39, GHL is required to mark to market the value of its equity portfolio. Because of its large investment in equity, the unrealized gains or losses of this portfolio are dictated by the movement in the price of the shares held in that account. Hence, this has resulted in an inconsistent bottom line which has been driven by the movement of those shares.

Also showing fairly high volatility of 29.03 per cent was Sagicor Financial Holdings (SFC). This share has been subject to a high degree of 'profit-taking' as a lot of shareholders received the share at zero cost when the Company de-mutualised. This action has therefore added to the volatility of this share. This Company is however backed by a strong asset base and at the current price of \$12.95 (Oct 25) and estimated Earnings Per Share (EPS) of \$1.47, it is actually trading at an attractive price/earnings ratio of 8.81 times earnings.

Table 3

Conglomerate Sector	Annualized Volatility
Ansa McAl	11.65%
Barbados, Shipping & Trading	12.10%
GraceKennedy	19.98%
Neal & Massy	11.60%

The Conglomerates also show roughly the same volatility as the Banking Sector (See Table 3). Most of these firms are backed by a very strong asset base and clients sometimes opt to hold shares for longer periods based on the stability and future prospects of these firms. GraceKennedy has a higher volatility in comparison with the rest in part due to problems they have been experiencing which have forced them have to revise their forecasts downward a couple of times. This influenced week on week drops in return by as much as 13 per cent (continuously compounded).

Table 4

Manufacturing Sector	Annualized Volatility
Angostura Holdings	24.71%
Berger	22.51%
Flavorite	4.01%
National Flour Mills	40.44%
One Caribbean Media	21.94%
Readymix	17.30%
Trinidad Cement Limited	23.83%
Trinidad Publishing	15.11%
Unilever	17.60%
WITCO	11.73%

The Manufacturing Sector houses shares with volatilities ranging from 4.01 per cent to 40.44 per cent (See Table 4). National Flour Mills was the most volatile in this sector

and actually the four sectors under review. This is no surprise as this share has been the subject of a lot of speculative activity after skeptical investors began offloading the share as the future profitability of the Company was questioned. This resulted in changes in the share price by as much as 24 per cent week on week.

Other Companies exhibiting high volatility in the Manufacturing Sector were Angostura (AHL) and Trinidad Cement Limited (TCL). Angostura's share price has been subject to speculation as the Company's management seeks to make Angostura a global brand. In addition, over the period under review, the Company has been producing disappointing results. Trinidad Cement Limited's (TCL) price has been oscillating as the Company has failed to produce consistent results.

It is interesting to note that Flavorite's volatility is only 4.01 per cent. While this low number may seem favourable, one has to keep in mind that this indicates very little price movement for the share and therefore little avenue for making money. Over 85 per cent of Flavorite's shares are held by substantial interests with roughly 1.2 million shares held by individuals.

This said, is it wise to simply invest in one low risk stock or in one low risk sector? The answer is an unequivocal no. As discussed in articles before, the key to diversifying risk is to invest in a portfolio. In this way you are able to reduce your risk by spreading your investment.

For instance, if you invested in Guardian Holdings (GHL) shares alone, you would have been subject to volatility of 30.53 per cent over the three year period and a compounded annual return of 6 per cent. However, if you invested in an equally weighted portfolio of RBTT, Ansa McAl (AMCL), Neal & Massy (NML), GHL and One Caribbean Media (OCM) your volatility would have been reduced to 11.17 per cent. Taking a second example, an investment in an equally weighted portfolio of Republic Bank Limited (RBL), TCL, RBTT, AMCL and WITCO would have brought your volatility down to an annualized rate of 8.25 per cent. The compounded annualized return on both those portfolios was approximately 22 per cent.

The important part of volatility is therefore making it work for you. The bottom line is we need volatility in order to make money. If there is no or little volatility, this means that there is little price movement and little room for making a profit. A more conservative investor should invest in moderately volatile stocks such as those from the Banking and Conglomerate Sector. A more speculative investor would be open to more highly volatile stocks. These investors however have to understand the risk that they are taking in making such an investment. Different degrees of volatility bring opportunities for all investors. The trick is finding the degree that is suitable to your risk tolerance and your needs.