Fat Tails and Fat Pockets

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April 2009

For he who is acquainted with the paths of nature, will more readily observe her deviations; and, vice *versa*, he who has learned her deviations will be able more accurately to describe her paths.

Sir Francis Bacon, English philosopher (1561-1626)

In recent weeks (March 2009) stock markets across the globe enjoyed a huge surge as confidence grew that the numerous interventions of monetary authorities would have the desired effect to pull ailing economies, especially the U.S.A., out of their misery and back onto a recovery path. At most there are tentative signs of "normalisation", yet markets are discounting that severe, drawn-out recessions and relatively high unemployment will no longer materialise in the near future. But, of course, no one knows for sure; therefore, risk (volatility) will remain an important feature of stock markets going forward.

What should be the investment strategy for stock market investors in these turbulent times? Invest boldly, i.e. allocate one's cash resources to the stock market at once, or perhaps gradually buy stocks (phase-in), or, alternatively, wait for absolute certainty before venturing into the stock market? Most rational, or should I say, reasonable people would opt for the wait-and-see strategy. Intuitively, it feels like the right thing to do – *alas* you won't put your feet in a bath tub without first testing the water temperature. Moreover, emotionally it would be the most pleasing or least risky strategy. We are simply very bad losers; nothing is more demoralising than buying assets today which you could have bought next month, say, at 75% of today's price.

Obviously, one does not have a clear-cut answer to the "best strategy" for today – one will know this only after the fact! Probably, for now it is a combination of a strategy with which one is emotionally most comfortable, but fine-tuned with some knowledge of how markets typically behave. In fact, one can learn valuable lessons from such behavioural studies; making it more than worthwhile to tweak one's investment strategy from the one you would have had from "gut feel" alone.

Let me highlight some behavioural issues investors should be aware of; *firstly*, about our tendency to follow the popular or consensus trends and *secondly*, specific characteristics of market return.

We formulate our opinions about the prospects for the market by reading and listening to market experts. Moreover, we are exposed to media reporting that is invariably geared towards sensationalism and contextualised for the present day. Yet, very few of us make the important inference that the validity of such expert and media comments is likely to be reversed over longer holding periods. For example, while certain sectors and stocks may be out of favour for the foreseeable future, a changing economic climate in the future could make those out-of-favour stocks major beneficiaries in a next cycle. And there will not be an alarm going off to announce the advent of such a new cycle!

A further issue arises from strictly following popular trends/sectors/stocks, namely: If those assets are generally deemed to be “excellent” investment opportunities by market experts, do current prices not already discount the perfect scenario going forward, i.e. very little risk premium built into the price? Generally, this is where many investors get seriously burned – think of IT stocks earlier this decade and lately resources and construction stocks – by following “expert advice” and popular trends blindly and not considering the price or reasonable assumptions.

Thus, as investors we need to be aware of our limitations to call the “winners” all the time. We need to be aware that overconfidence in our (or experts’) predictive abilities may seriously harm our investment returns. Hence I would state the case for following an “autopilot” stock market investment strategy – typically an index or enhanced index fund – as one’s core investment strategy. It is fun and gratifying to manage one's own stock portfolio, but beware that the downside to that is equally stressful.

Firstly, one gets emotionally affiliated with one's stock selections. Thus making it difficult to sell some holdings when one perhaps should do so in times of buoyant market prices, or retaining stocks when market conditions are depressed. *Secondly*, it is unlikely that one will be able to build a truly diversified portfolio (unless one has a few million rand invested) which would overcome one’s tendency to have strong biases and preferences about certain sectors of the market. The outcome will consequently be concentrated portfolios, which may work well for many years until one encounters market conditions similar to the 2008-09 versions!

Let us turn to some stock market characteristics. More often than not stock market returns may surprise one given the market conditions at the onset; for example, decent market returns during dire economic conditions. There is much less direct or linear relationship between how stock markets perform and how the real economy is performing, unlike what investment theories may dictate.

Market performance over short-term periods (which we tend to take very seriously despite our “long-term intentions”) is predominantly determined by sentiment (expectations) about what is most likely to pan out in the near future and not about what has happened until now. Hence it is not impossible that we might still see a surprisingly positive stock market performance for the year 2009 despite the prevailing depressing economic conditions and companies’ declining profit margins.

Most investors are fooled by how market returns arrive in one’s investment portfolio, and thus leading to gross behavioural errors. It is not a steady accumulation process, but short bursts of large positive and

negative price movements which would predominantly determine one's investment return from the stock market. And these large movements are not predictable; i.e. most large positive price changes do not occur during bull markets only. Similarly, large negative price movements do not happen only during bear markets.

For illustrative purposes I reviewed the daily returns of the FTSE/JSE All Share index for the period 1 July 1995 to 31 March 2009. In total there were 3,422 trading days (data points). Subsequently, I identified the twenty worst and best daily returns during this period. For the worst 20 trading days it meant all market losses more than -4.5% per day and for the best 20 days daily gains greater than 4.78%.

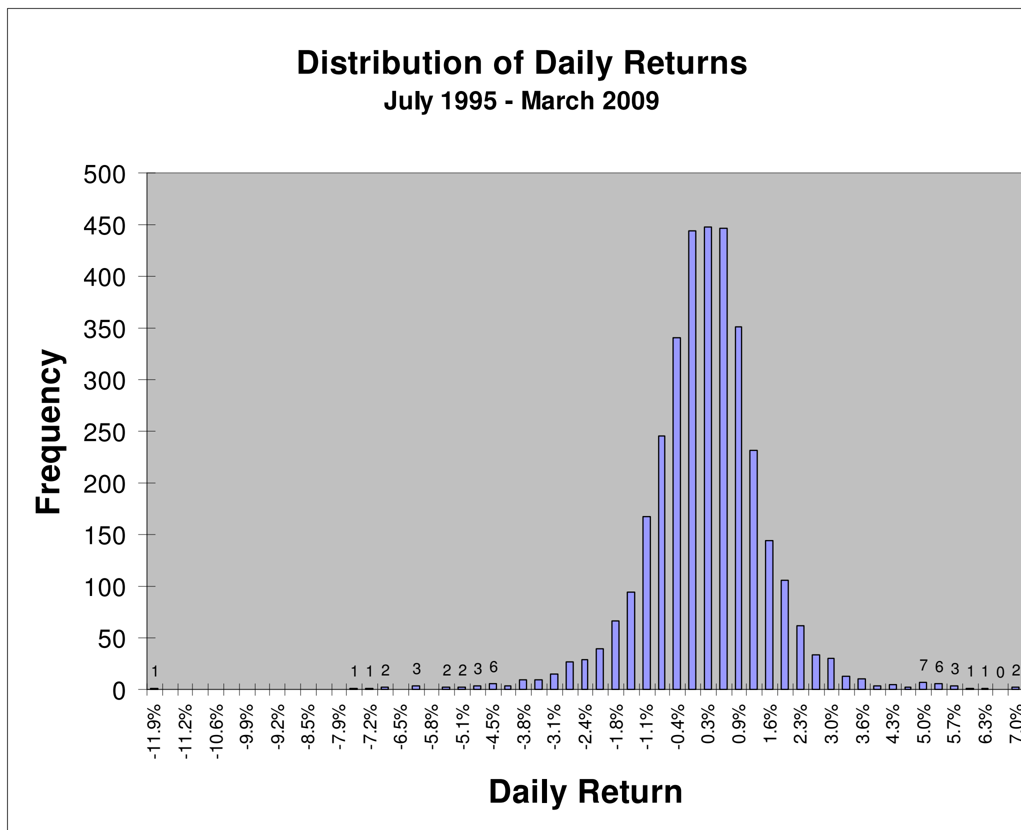

Chart 1:

Source: DRW Investment Research, 2009.

The importance of these outliers in determining total market return is clearly demonstrated by the following facts: Since July 1995 the FTSE/JSE ALSI produced an annualised return of 11.5% (excluding dividends), but if for some reason one could have avoided the worst 20 days the market return would have been enhanced to nearly 24% over the same period! It means the difference between the two

outcomes would have been that the latter outcome appreciated 3.5 times more than the ordinary buy-and-hold portfolio over this period!

The same holds for the reverse position. When missing the best 20 days over the review period the annualised return of the ALSI index would have been trimmed to a miserable 2.5%. Alternatively stated, the ordinary index portfolio would have appreciated three times more over the period!

Thus an investor needs to avoid the worst trading days, but one should be in the market not to miss the best trading days. Something like avoiding the bear markets and investing during bull markets? No, not a chance if one considers when these outliers (best and worst trading days) occurred.

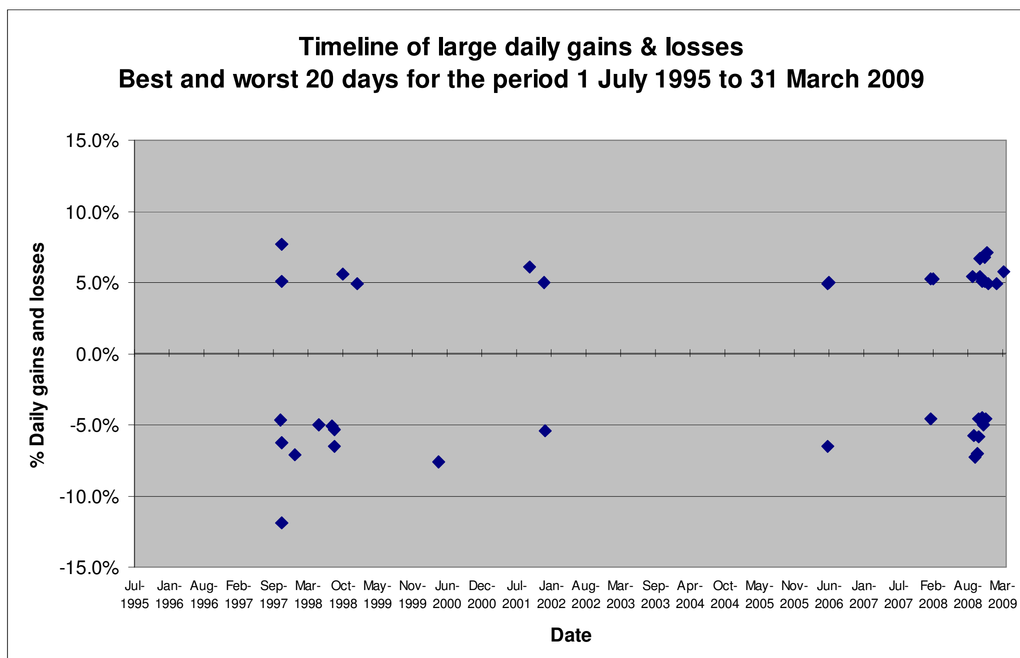

Chart 2:

Source: DRW Investment Research, 2009.

From chart 2 it is undoubtedly shown that the best and worst days occurred more or less around the same time. Typically, a large loss was followed up by an equally large gain soon thereafter and *vice versa*. Thus an investor who experienced large losses and withdrew from the market would unlikely have been in the market when the sharp rebound in prices would have occurred shortly thereafter. In fact, this pattern shown above makes a mockery of trying to time entry or exit points in the stock market.

Market timing is a futile investment strategy and while it sounds emotionally gratifying to many investors it offers very little, if any, return enhancement and more than likely will cause the opposite outcome.

Consequently what should we know when deciding upon our investment strategy? *First*, outliers do matter a great deal in determining our total stock market return. Typically, when markets are volatile, as it is at the moment one is running a great risk of not being in the market, especially after a burst of relatively large negative returns. A large rebound is a real possibility.

Secondly, the stock market will test its lows and start its bull market journey long before the economy has recovered officially; typically 6-9 months ahead of the economic cycle. Therefore, it will not make a great deal of sense to wait for economical statistics to confirm economic recovery. Moreover most of the large market gains are likely to materialise soon after market lows have been reached.

Thirdly, we should know that there is a significant inverse relationship between market returns, say, over 5-year holding periods and the stock market's primary valuation metric, the price/earnings multiple (P/E ratio). Simply, the higher the P/E multiple at the start of an investment, the chances are the subsequent market returns would turn out to be disappointing or meagre. Conversely, the opposite holds.

However, there is one caveat. The market's current earnings base (as the denominator in the formula) may be skewed by extraordinary periods of earnings growth and economic prosperity like we witnessed during the period 2003 – 2007. Therefore it would be more appropriate to average out earnings growth, say, over 7-year periods; i.e. to "normalise" the earnings base. The relative expensiveness of the market is then measured more realistically then simply using the current data. Such an approach is depicted in chart 3 and is being referred to as the "trailing P/E ratio".

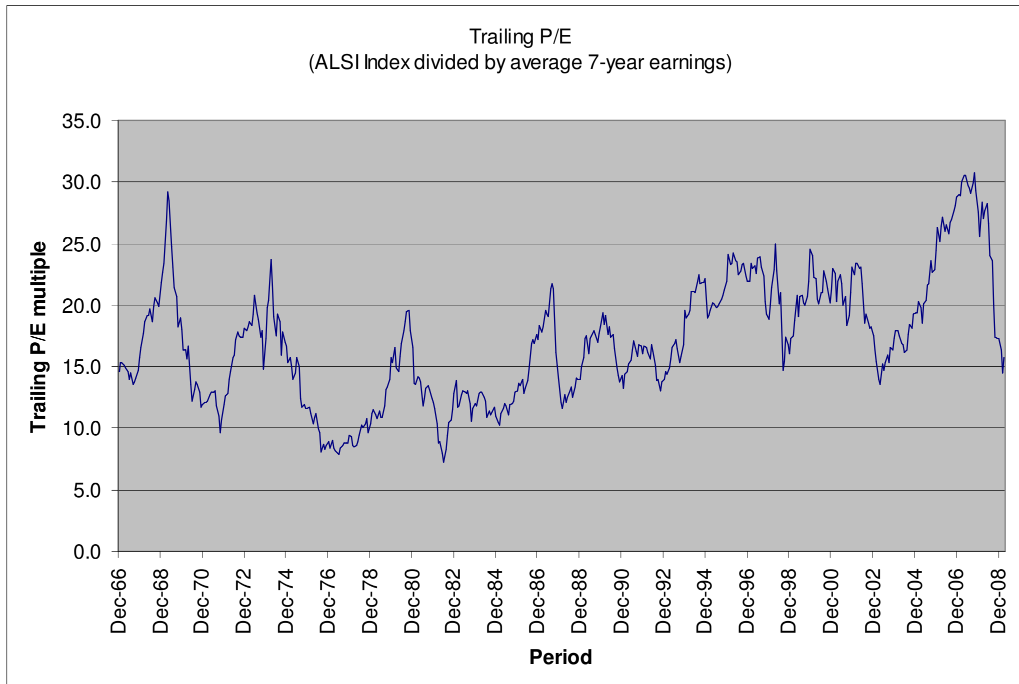

Chart 3:

Source: DRW Investment Research, 2009.

Clearly, at the moment the market's valuation rating has been downgraded to levels similar to the bear markets of the early 1990s, 1998 and 2002-3, yet not as low as the politically unstable and economic turbulent periods of the 1970s and 1980s.

In Chart 4 the stock market's trailing P/E ratio since 1960 is plotted against subsequent 5-year market returns. A statistical significant inverse relationship is found; i.e. the lower the trailing P/E ratio at the start of an investment period, the higher the subsequent 5-year period returns would have been, and *vice versa*.

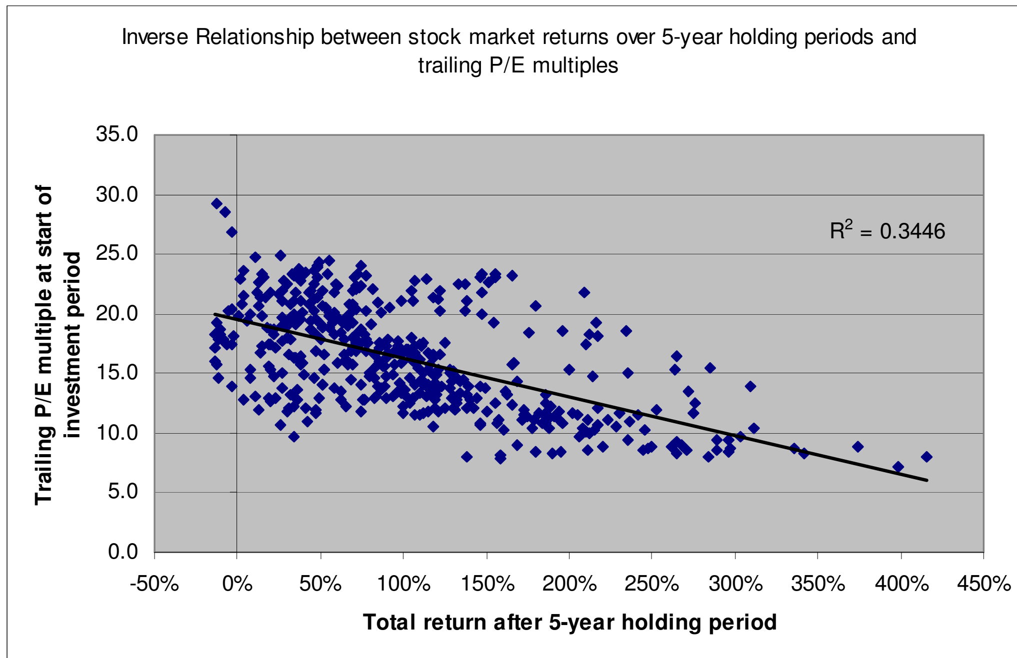

Chart 4:

Source: DRW Investment Research, 2009.

Today the market's trailing P/E ratio is at a multiple of 15 – neither expensive nor extremely cheap – but the overweight of historical evidence points to reasonable return expectations from the current level going forward.

Hence, it will not be surprising, and I know it seems very unlikely given where we are today, if we could boast with very pleasing market returns in the next 5-year period. At least the tendencies of market returns to mean revert and to conform to historical patterns over longer holding periods are strong allies.

Thus, while from an emotional standpoint we may not feel comfortable by risking our hard-earned monies in the volatile stock markets today, the history and characteristics of stock market returns lead us to believe that such times are the most promising entry points. Therefore, do not postpone or stop your investment plan altogether. Maintain your strategy. In fact, if you decide to use a phase-in approach perhaps speed up your implementation period.