Chapter 8: Approaches to Utilize in the Stock Market

"If you don't know where you are going, you'll end up someplace else."

Yogi Berra

"If the stock market is what it is going to be, what stocks approach should I use? I have heard of so many strategies. Where should I start?" asked Iain.

I responded, "I'll preface this session by saying that I will explain some stock market approaches for DIY investors and briefly explain their relevance to investing for retirement. I would like you to understand how realistic and practical, or not, these approaches are for everyday investors focused on sustained long-term investing in their busy lives."

"In the broad sense, active mutual funds can be viewed as a stock market approach. We have already dissected them and, clearly, we are looking for an alternative to investing in active mutual funds."

"I will discuss some instruments that are used in various investing strategies in the stock market so that you become aware of the scope of available methods. However, it is suggested that retirement capital is not used to invest with these strategies. I will suggest why, even though they are valid strategies to meet other investing objectives."

I continued, "Retirement investing requires a balance between return and risk to meet your retirement investing goals. This balance necessitates each investor to adopt and accept risk management techniques to meet the stated aims of an Investment Plan. We'll discuss the Investment Plan in due course."

Investing Instruments to Avoid

"There is a vast array of investing approaches available, typically based on various investing instruments such as:

- Options,
- Futures,
- Forex,
- Spread betting, and
- Contracts for Difference, or CFDs."

"There are valid trading strategies that can be used with all these instruments, however, the everyday investor shouldn't use them when investing for retirement. I use the word 'trading' because an ordinary investor would not be 'investing' when using these instruments."

"For example with stock options, an approach such as writing covered calls is a good strategy; potentially for generating income, but not as a core growth retirement investing strategy."

"All of these instruments have leverage built into their structure. Hence they are high risk and mainly lend themselves to short-term strategies with positions that are open from a day a few weeks. They are time intensive to execute and better suited to generating income that achieving growth."

"Remember, Iain, we are talking about investing for retirement. Therefore, we want to instill a strategy that doesn't take up much time, is preferably not leveraged and is a viable, practical and fruitful way to solve the problem of growing a retirement nest egg over the long term. Everyday investors require ***strategies that can be followed consistently for twenty to forty years, or even longer, to grow capital*** in a way that doesn't impact an everyday person's chosen lifestyle."

"Almost any strategy could be subjectively justified to meet these criteria, but in reality, only a minuscule number of investors working in a full-time job would be able to execute strategies successfully for decades with the instruments mentioned above."

"To help us determine whether any particular strategy is relevant to solving the retirement investing equation an everyday investor with a full-time job should ask this question: ***would I invest all, or a significant portion, of my retirement savings using strategies with any of these instruments that require lots of vigilance and activity?***"

"The answer to this all-important question is an emphatic NO!"

"The question then begs for those that do use trading strategies with these instruments: what strategy do they use for their most important portion of capital, their retirement nest egg? I would sincerely hope that their nest egg is not sitting in a Balanced Fund somewhere while they spend many hours a week trading with small amounts of capital!"

"What about 'shorting'?" asked Iain.

I responded, "Without going into the mechanics, 'shorting' is when a trader profits from a price decline in the market. Firstly, would you answer 'yes' to the question that I have just posed? I'm sure that you will not. Secondly, all forms of 'shorting' use leverage of some sort and hence has to use timing. Thirdly, with the far better returns that are possible without shorting you don't need to use shorting."

Iain followed up this emphatic statement, "This overview is helpful. I can now more easily discern relevant investing information and eliminate so much of what I've been bombarded with via emails and social media since I started looking for a better way than the active mutual funds. I'm going to unsubscribe from all those emails that are just not relevant for growing my nest egg for retirement."

Potential Investing Strategies to Use

"Now, I will concentrate more on what strategies *could* be used rather than which ones to avoid. There are a number of ways to execute stock investing. I'll try to simplify my explanation by classifying the approaches into four main categories:

- The first is a long-term buy-and-hold of a stock portfolio, where the investor selects stocks and never sells them. Timing is not used in this approach.

- Next is long-term active investing of stocks. Selling and then buying another stock occurs from time to time, compared to buying and holding forever come-what-may. A little leverage could be considered at levels much lower than are used by property investors. A minimum of sixty percent equity and a maximum of forty percent borrowed.

- Then there's active medium-term investment where a higher turnover of portfolio capital occurs. Consider a little leverage.

- Lastly, there is short-term trading of stocks."

Stock Market Approaches

"There are many timeframes in which stock market investing can occur, ranging from the intraday timing of stock price movement from a few minutes, even seconds, for each trade to using monthly prices and open positions lasting many years. Along with each approach comes a varying degree of difficulty, time requirement, knowledge, skill, temperament, mindset, attitude and capital requirement. A 'trade' is the round trip of entering a positon and then closing that same position."

"Why would I need to know about these different approaches?" asked Iain.

"You wouldn't if you accept the research that has been done by SPIVA® Scorecard and merely implement an approach that mimics an index to achieve performance similar to a Total Return index. Thereby outperforming around 85% of all active equities funds over five years, including 401(k) providers and all types of balanced funds."

"However you may wish to put in a little extra effort and do better by 1%, 2%, 3%, 4% or even 5% compounded per year than the Total Return indices and in so doing achieve two important objectives:

1. Accumulate an even larger retirement nest egg that, due to the power of compounding, could mean hundreds of thousands of dollars more in savings and thereby potentially eliminate longevity risk and achieve complete financial freedom.
2. Remove the possibility of having your retirement capital exposed to a significant market fall just before or during retirement."

"How do I decide whether to put in a little extra effort and how much is a little extra?" asked Iain.

"Once you establish the process with the core solution that I will provide, the little extra effort shouldn't be more than fifteen minutes a quarter. However, a more active 'Core Satellite' investment approach will require more effort, around an average of fifteen minutes a week. For those that are interested, an even more active approach would require fifteen minutes a day."

"What do you mean by 'Core Satellite'?" asked Iain.

"I'll come to that shortly. You decide which approach by determining what you want to achieve. You start by stating your ***investing mission and objectives***. A person's investing mission and goals determine which active approach and strategies to use and whether a more active approach is, in fact, appropriate for them."

"You're starting to talk about plans and structure with my investing," said Iain. "I had always viewed my investments as something that just happens based on the decision I made initially, without much thought, when I checked off the box on the 401(k) Plan form."

"That's exactly why you and many millions of other employees underachieve their saving for retirement, as we've seen from the EBRI research in Chapter 5. With respect, most people are apathetic, confused, ill-prepared, or use the 'I'm too busy' excuse. In fact, these decisions are amongst the most important choices people will ever make."

"Another reason to be aware of different stock market approaches is to understand the concept of ***diversifying with strategies in the same asset class rather than diversifying across different asset classes***. Typically, this means using strategies that focus on various time frames and instruments within the stock market asset class, with a predetermined amount of capital being allocated to each strategy, thereby creating varying strategies suited to handling different market conditions."

"That's quite smart," said Iain. "I understand that whether I do this or not will depend on what I want to achieve with the resources of time, capital, tools and skills that I have available to me."

"Correct," I said. "But before discussing the mission, objectives and strategies, let's first explain the different investing approaches that can be used realistically and practically by average investors with a full-time career. We'll come back to these important planning concepts when we cover your Investment Plan."

"Okay," said Iain.

Long-term Buy-and-Hold

"The first area of stock market investing to discuss is a passive direct stock investing approach rather than 'active investing.' It is the long-term buy-and-hold approach."

"This approach involves constructing a portfolio of stable listed businesses that have strong long-term growth potential by picking stocks many years in advance based on intrinsic company value, or what's also called fundamental analysis of company balance sheets and profit and loss statements over many years. It is also known as value investing."

"The philosophy is only to add stocks or add existing capital to the portfolio as more investing capital becomes available. Also, core to this approach is receiving dividends and either re-investing them to compound long-term returns, which is highly recommended, or taking the dividends as income on which to live."

"Many years ago this used to be the only way that sophisticated individual stock market investors invested because transaction costs were very high and liquidity, even in large-cap stocks, was low compared to today."

"Buy and sell commissions around the world were typically anywhere between 1.5% to 2.5% to buy and then 1.5% to 2.5% to sell a stock, which meant at least 3% to 5% positive movement was required to get beyond breakeven and into profit. High transaction costs forced investors to have a long-term buy-and-hold approach since the average investing period in the stock market over the long term to achieve 5% growth is around six to nine months."

"Since the mid-1990s commissions to buy and sell stocks have dropped dramatically, by as much as twenty-fold, and as a result, shorter to medium-term trading approaches have become more popular and more successful."

"Liquidity was also an issue many years ago. I define liquidity as the daily dollar value of a stock's turnover on the stock exchange. To give you an idea of how illiquid stocks were from the 1950s through today, let's look at a large-cap stock such as General Electric that has been one of the thirty components of the Dow Jones Industrial Average (DJIA) index since November 1907."

"Consider the average daily dollar turnover of General Electric through the 1960s of around $2,750,000 and apply an overstated compounded average rate of inflation of 5% over fifty years. In 1965 terms the average daily dollar turnover today should be $31,500,000. GE averaged around $800,000,000 daily turnover from 2010 to 2015; some twenty-five times higher than it should be in 1965 terms, indicating that liquidity was relatively low back then compared to now."

"Doing the same exercise for other long-standing Dow Jones components you'll find that today's liquidity has increased massively in real terms compared to the 1960s:

- Proctor and Gamble (PG) today should average around $6,870,000 in 1965 terms and averages around $650,000,000, some ninety-five fold higher.
- IBM today should be $80,500,000 and is $825,000,000, some tenfold higher.
- EI Du Pont de Nemours (DD) today should be $17,500,000 and is $300,000,000, some seventeen times higher.

"This meant that back then large positions in stocks by mutual funds and even individual investors had to be accumulated over a number of purchases, each attracting transaction costs which added to how much more the stock had to rise to cover costs. The more the stock price had to rise to cover costs, the longer it needed to be held to achieve the price rise."

"Accumulation over many weeks or even months caused demand over longer term periods through accumulation and longer term periods of distribution when selling a stock. Of course liquidity and brokerage issues are no longer as big a problem as they used to be. That allows using more active approaches, which we'll cover in a moment."

"There are many brilliant examples of long-term buy-and-hold businesses. In hindsight, 3M, IBM, and Apple are three such businesses."

I provided some details to Iain showing the following:

- 3M (MMM), up 65,900% or 10.52% compounded per year from February 1950 to the March 2015 peak, excluding dividends.
    - 3M became a Dow Jones component in August 1976 and is up 2,167% since, or 8.43% compounded per year to its peak in March 2015, excluding dividends.
- IBM, up 78,500% or 11.22% compounded per year from its trough in July 1950 to its last peak in March 2013 before writing, excluding dividends.
    - IBM was a Dow Jones component from May 1932 to March 1939 and took a 40-year break before becoming a Dow component again on June 29, 1979. From this date to its peak in March 2013 IBM was up 1,076% or 7.58% compounded per year.
- Apple Inc. (AAPL), up 25,800% or 17.64% compounded per year from its initial listing date in December 1980 to its peak in May 2015, excluding dividends."

"I could provide many more examples showing that buying and holding a portfolio of solid businesses that have strong long-term growth potential and picking them many years in advance sounds like a logical thing to do."

"Surely all you have to do is find these household names and just hold onto them forever?" asked Iain.

"That's easy with the benefit of hindsight," I responded.

"The major downside to the buy-and-hold approach is that, by definition, the investor doesn't sell, which means the investor has to sit through significant bear markets without selling."

"There is a very high correlation in the price movements of nearly all stocks in strong rising and weak falling markets. You may have heard the phrase that all ships in the harbor rise on the incoming tide, and they all subside on the outgoing tide. Concerning the stock market, this means that there is a low probability of being invested in stocks that rise strongly in a weak market. Buy-and-holders in stocks mostly endure just about the whole fall in severe bear markets such as the recent 2008 bear market which delivered a -56% decline in the U.S. and similar declines in other stock exchanges around the world."

I continued, "Investors may have the stated intention to buy-and-hold, which means never sell. But when markets have dramatic downturns, most individual investors don't have the mental stamina to hold onto the stocks as they intended. Many sell most or all of their holdings. They do this when the pain becomes unbearable, not having a strong enough temperament, and that is typically when the market declines -30% to -55%. If they do manage to hold on, it is with many sleepless nights and lots of stress. Fear of losing more is usually the reason that investors battle to continue holding."

"And, of course, having been burnt and scarred mentally by the massive losses they take on the way down, they usually don't buy back in when the market starts rising again, fearing more pain from another potential fall should it occur. This ensures they don't participate in the rise after that, meaning they lock in the loss without ever making it up."

"I've heard and read about this," said Iain supportively. "Indeed, I watched the value of my funds drop around -30% in 2008. I know how I felt when examining my retirement statement at the time, it was gut-wrenching. I couldn't avoid hearing about the market decline; it was on TV, in the newspapers, on the Internet, everywhere…"

I continued, "That drawdown is similar to the Vanguard Balanced Fund, which fell -29% during the 2008 bear market. In that rather severe bear market, we saw blue chip banking stocks in the U.S., including Bank of America and Citigroup, falling at least -90%. More than six years later these two are still down -67% and -89%, respectively, from their pre-2008 highs."

"Citigroup was a Dow Jones Industrial Average (DJIA) component before the 2008 bear market; it was dropped from the DJIA index in June 2009 after it was added in 1999, or technically in 1997, as Travellers Inc."

I showed Iain the semi-logarithmic charts of Bank of America (BAC) from 1979, Chart 8-1, and Citigroup (C) from 1986, Chart 8-2.

Iain said, "Not only are those massive falls, look at the huge long-term run-ups before the 2008 bear market. It would have been great to use timing to lock in those gains by selling before the massive decline."

"That's exactly what we'll be looking at." I clarified the size of the falls for Iain, "BAC's price rose from around 50 cents in the early 1980's to $55 in November 2006 before falling to $3.14 in March 2009. Citigroup's price rose from $9.20 in October 1990 to $564 in December 2006 before falling to $10.20 in March 2009."

Printed with permission from Beyond Charts Chart 8-1

Printed with permission from Beyond Charts Chart 8-2

"While I single out these two, in every severe bear market there is always significant collateral damage to some of the biggest large-cap stocks that is far more than the damage to the index. Investors who have holdings in these stocks get hammered by more than the index as we'll see in a moment."

"And here's the important point to which few people give credence - ***if they have very large holdings of these stocks in their portfolio relative to their other stocks, then the damage can be even greater in their portfolio than the index.***"

"Can you please explain what you mean by this?" asked Iain.

I replied, "If Citigroup is twenty-five percent of an investor's total portfolio, the overall effect on the portfolio will be greater than the effect Citigroup has on the movement of the DJIA index. Because Citigroup's weighting in the DJIA index was far less than twenty-five percent, more like 1% to 3%, depending on the index."

"Ok, I get it," said Iain.

"Consider if stocks like Lehman Brothers, Freddie Mac, Fannie Mae or Bear Stearns that were delisted went to $0 in your portfolio. Enron was another firm whose share price fell from above $90 to twelve cents over eighteen months in the 2002 bear market before being delisted. So did WorldCom, in the same year. There are many more companies if you care to investigate. And many index constituents in other countries have also dropped out the index and delisted with shareholders losing all their money invested in the individual stock."

"***An index can never fall to a value of zero*** because the index custodians cull such stocks from the index as their market capitalization decreases before they reach $0 and a stock whose market capitalization is increasing replaces them. ***Meaning that indices are biased to increase over the long term***."

"Wow," said Iain, "that's almost unprincipled!"

"It might appear that way, but that's how things work. We should ensure that we use this to our advantage. This bias is called ***'survivorship bias'*** where indices are biased towards survivors that continue to prosper relative to the laggards and underperformers that drop out of the index. The DJIA is a price-weighted index but market capitalization indices such as the S&P500 are weighted toward survivors, or, more precisely, against laggards."

I continued, "Massive declines in large-cap stocks are not confined to U.S. stocks. For example, the biggest bank and stock in Australia, Commonwealth Bank (CBA), fell -60% during the 2008 bear market with other bank stocks falling -78%. Many of Australia's Real Estate Investment Trusts (REITs) fell -90%, and over six years later most of the REITS were still down substantially having recovered around only half of their pre-2008 bear market falls."

Case study of Lehman Brothers

To emulate 'living' through such an experience, I took Iain through the case study of Lehman Brothers. "I'm sure that many buy-and-hold portfolios and many active managed funds, both in the U.S. and elsewhere in the world, had positions in Lehman Brothers, given it was the fourth largest investment bank in the United States."

I started, "Over ten years from February 1997 to February 2007, Chart 8-3 shows that Lehman rose over 1000%, or 27% compounded per year, excluding dividends. Over the same period, the S&P500 rose 6.32% compounded per year. Massive outperformance, I'm sure you'll agree."

"Absolutely," said Iain. "Fund managers would have been lapping that up."

Chart 8-3

"During that 1000% rise, Lehman Brothers had declines of -67%, -50%, -25% and -25% marked by A, B, C and D in Chart 8-3, respectively. If long-term buy-and-holders had held their positions through these falls, then the odds are they would never sell Lehman Brothers come-what-may, since the stock had always recovered. And it was a 150-year-old business that had survived everything imaginable until then."

"The falls marked at points A, B, and maybe D, in Chart 8-3 should have triggered exits from the positions using technical analysis - which I'll explain soon - long before they reached their low points. The investor could have then repurchased the stock on the way up using well-defined re-entry technical analysis timing criteria. I'll explain more about this later so let's ignore exiting and re-entry to make the point for this buy-and-hold discussion."

I laid out a printout on the table of a press release from December 2007 for Iain to read.

Lehman Brothers Reports Record Net Revenues, Net Income and Earnings Per Share for Fiscal 2007

NEW YORK, Dec. 13 /PRNewswire-FirstCall/ -- Lehman Brothers Holdings Inc. (NYSE: LEH) today reported net income of $886 million, or $1.54 per common share (diluted), for the fourth quarter ended November 30, 2007, representing decreases of 12% and 10%, respectively, from net income of $1.0 billion, or $1.72 per common share (diluted), reported for the fourth quarter of fiscal 2006. For the third quarter of fiscal 2007, net income was $887 million, or $1.54 per common share (diluted).

For the 2007 full fiscal year, net income and earnings per common share (diluted) increased 5% and 7%, respectively, to a record $4.2 billion and $7.26, respectively, compared to $4.0 billion and $6.81, respectively, in

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fiscal 2006. The 2006 results include an after-tax gain of $47 million, or
$0.08 per common share (diluted), from the cumulative effect of a change in
accounting principle associated with the Firm's adoption of SFAS 123R on
December 1, 2005.[1]
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"The point is that over the following nineteen months, as shown in Chart 8-4, Lehman Brothers fell from $86 to $3.65. This fall was at least -50% from the original 'buy' price in February 1997 but at least a -95% decline from its high in February 2007, losing $60 billion in market capitalization and investors' money."

"This occurred despite Lehman Brothers reporting record annual profits in December 2007."

Chart 8-4

"-10%, -20% and even -50% loss situations stand a chance of recovery, however -95% loss situations, ***if they ever recover to reach a new high***, will take many years. ***A -50% loss requires a rise of 100% to get back to its original price, but a -95% loss requires a 1900% increase in price***. Such a loss is a "largest loss trade" from which few recover, especially if the stock is a majority holding in a portfolio after a 1000% rise. These stocks must be eliminated from every investor's portfolio BEFORE these losses happen, and TIMING is the only way to do this."

"But very few would have bought near the highs of $85," Iain suggested.

"Okay, let's assume that a large active mutual fund took a large long-term position in July 2004 at $37.50 on the way up. If the fund continued to hold, ***its loss would be -90% as at September 2008 and would require a 900% rise in price to breakeven***, excluding dividend returns. Even buying on the way down at $25, because it was a 'bargain', would still have been a -85% loss requiring a rise of 576% to breakeven! **Even well-educated people**

[1] The full report can be found here: http://www.prnewswire.com/news-releases/lehman-brothers-reports-record-net-revenues-net-income-and-earnings-per-share-for-fiscal-2007-58705737.html

who understand this simple arithmetic, make these elementary errors when blinded by greed or are swayed into misguided action by unfounded or subjective opinion."

"Using technical analysis techniques for beginners, a long-term position should have been closed at around $73 at the earliest in March/April 2007, but certainly around $68 at the latest using even the slowest technical analysis timing techniques. I doubt that fundamental analysis would have uncovered this at that time because Lehman's last quarterly report was in December when they reported record annual profits."

"Even the most stubborn long-term technical analyst using long-term timing techniques should have closed a position when Lehman Brothers fell below $50 in March 2008. Any of these exits would have yielded significant profits for long-term position holders and manageable losses for those who had bought above $50 on the way up."

"It's so clear and straightforward in hindsight," said Iain. "Are you telling me that I can do this in real time?" he asked.

"Absolutely. Tens of thousands of ordinary non-professional investors around the world use technical analysis to do this," I replied. "***Successful active investors are not born; anybody can learn how to do this and gain the necessary skills to be successful for decades***."

"In other countries such as Australia, there are also many examples of high-profile stocks such as Bond Corporation, HIH Insurance, Sons of Gwalia, Allco, ABC Learning, Centro Properties, Brashes, MFS (which became Octavia Ltd), One-Tel and Babcock & Brown that have cost investors their entire invested position. All of the stocks mentioned above were part of their respective indices, the Australian All Ordinaries index at some stage."

"Remember that when stocks fall in market capitalization they fall out of the index. Therefore, their complete fall from grace is not registered in the index but their entire fall, should you continue to hold them, will be recorded in your portfolio for the rest of your life. Again, this is known as "survivorship bias" which is inherent in stock indices."

"I think I'm sufficiently cured of any buy-and-hold thinking," said Iain.

I responded, "As time goes on, more people who used to subscribe to the buy-and-hold approach are abandoning it. That's somewhat surprising since most financial commentators advocate against timing the market. You can't change from buying and holding stocks and not time the market. You have to do one or other."

Iain added, "How can the financial industry keep saying that investors can't time the market, and yet there is so much buying and selling going on by mutual fund managers? Every magazine and financial publication lists buy, hold and sell recommendations every day! And financial newspapers regularly interview fund managers about their recent stock picks and those that they are discarding."

"You are quite correct," I answered. "In fact, here is a list in Table 8-1 of some Balanced Funds showing their annual **Turnover** to the end of 2015."

Code	Active Mutual Fund	Fees	FuM	Turnover
SFAAX	Wells Fargo Advan. Index Asset	1.15%	937M	43%
LKBAX	LKCM Balanced Fund	0.80%	375M	20%
IBNAX	Ivy Balanced Fund	1.11%	2.6B	33%
WAGRX	InvestEd Growth Fund	1.05%	150M	29%
ABALX	American Balanced Fund	0.59%	83.6B	68%
FBALX	Fidelity Balanced Fund	0.56%	29.2B	128%
FPURX	Fidelity Puritan	0.55%	25.2B	106%
VBINX	Vanguard Balanced Fund	0.23%	26.5B	53%
VWELX	Vanguard Wellington Fund	0.26%	86.8B	71%
RPBAX	T. Rowe Price Balanced Fund	0.60%	4B	53%

Table 8-1

"100% turnover means that the entire FuM (Funds under Management) was sold and bought during twelve months. The lower the annual turnover, the closer the active mutual fund is to buy-and-hold. ***All the active mutual funds have a turnover greater than 0%, and hence they time the market!*** The annual turnover percentage is adjusted to remove inflows and outflows of cash meaning that the figures shown indicates trading activity."

"That sounds like another myth debunked!" exclaimed Iain. "Just look at how much buying and selling occurs in the two funds FBALX and FPURX shown in Table 8-1 compared to the others!"

"I rest my case," I concluded.

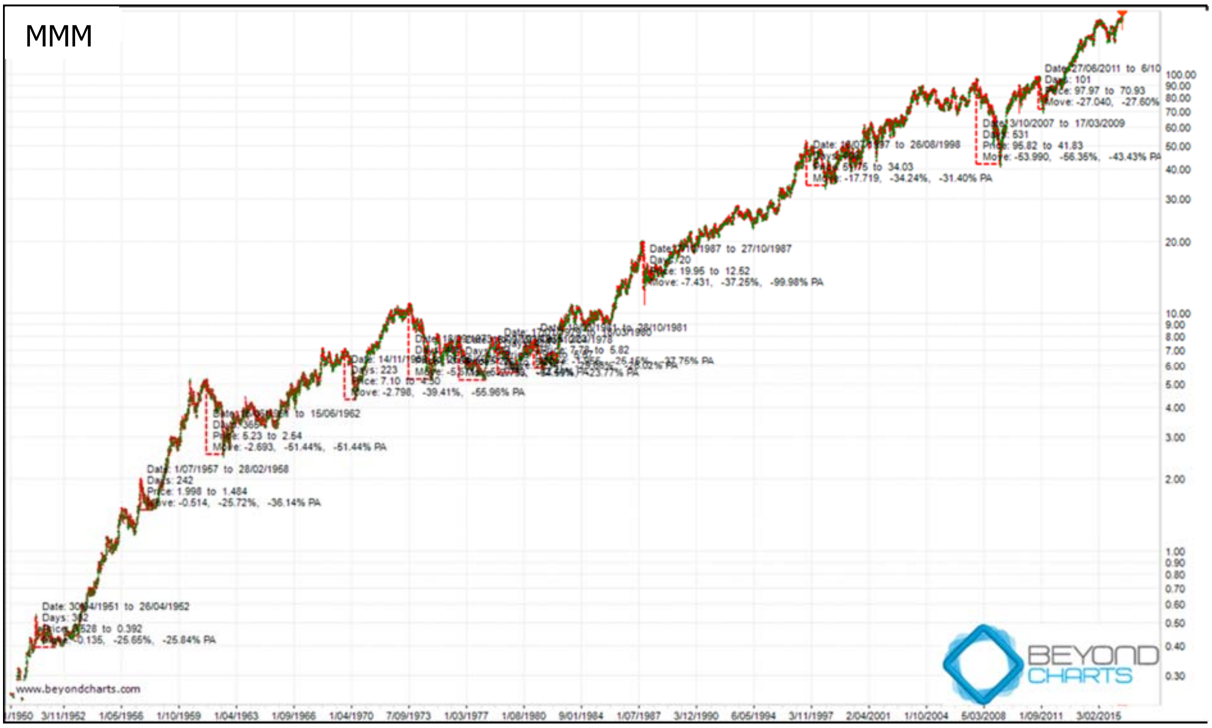
Long-term buy-and-hold volatility

"Let's return to 3M, IBM and Apple, the three household names whose stellar long-term growth we looked at earlier, to see how their respective journeys panned out to achieve those brilliant growths of 10.52%, 11.22% and 17.47% compounded per year over many decades."

I provided Iain with long-term semi-logarithmic charts of these three stocks' performance, highlighting their down periods:

Chart 8-5 shows that 3M had twelve periods of at least -25% falls in its stock price over sixty-five years (it's not necessary to see the detail on the chart just the long-term growth):

- -25.7% from May 1951 to April 1952.
- -25.7% from July 1957 to February to 1958.
- -51.5% from June 1961 to June 1962.
- -39.4% from November 1969 to July 1970.
- -52.1% from September 1973 to January 1975.
- -34.6% from September 1976 to April 1978.
- -29.7% from January 1979 to March 1980.
- -25.2% from March 1981 to October 1981.
- -37.3% during October 1987.
- -34.2% from July 1997 to September 1998.
- -56.4% from October 2007 to March 2009.
- -27.6% from July 2011 to October 2011.



Printed with permission from Beyond Charts Chart 8-5

Chart 8-6 shows that IBM had eight periods of at least or equal to -30% falls in its stock price over sixty-five years:

- -49.3% from October 1961 to June 1962.
- -41.6% from January 1970 to August 1970.
- -57% from February 1973 to September 1974.
- -38.9% from April 1979 to November 1981.
- -76.5% from August 1987 to August 1993.
- -60.1% from July 1999 to October 2002.
- -44.7% from July 2008 to November 2008.
- -29.84% from March 2013 to December 2014.

Printed with permission from Beyond Charts Chart 8-6

Chart 8-7 shows that Apple Inc. had eight periods of at least -40% falls in its stock price over thirty-four years:

- -69.4% from December 1980 to July 1982.
- -76.7% from June 1983 to August 1985.
- -57.8% from October 1987 to October 1990.
- -82.2% from April 1991 to December 1997.
- -81.8% from March 2000 to April 2003.
- -40.8% from January 2006 to July 2006.
- -60.8% from December 2007 to January 2009.
- -44% from September 2012 to April 2013.

Printed with permission from Beyond Charts Chart 8-7

I added, "These stats are for -25%, -30% and -40% falls but if we counted falls of at least -15% there were more than 160 falls across all three stocks in up and down trends and around **100 in up trends only**."

Iain gazed at the massive percentage falls that all three of these stocks endured over the years. I guessed that he was considering whether he would have the endurance to sit through such falls in price if he had invested directly in these stocks.

I could almost hear him mentally calculating his hypothetical losses.

"What are you thinking?" I asked.

"I have some questions," he said. "Firstly, are such declines normal for most stocks?"

"They are," I said. "But remember you are looking at one thirty-four-year chart and two sixty-five-year charts. Many stocks could have even more volatility than these three and many others less volatility. Many would have hardly any growth over decades and many even negative growth."

Iain asked, "Apple had two -80% falls close to each other, within just over two years. How does somebody handle that? How much does the stock have to rise to get back to the price it was at before each of the -80% falls?"

"One divided by, one minus 80%, and then subtract one," I replied. "So, one divided by 0.2 equals five, then subtract one, equals four, represented as a percentage equals 400%."

"Did Apple rise by 400% twice within a few years after each of the 80% falls?" Iain asked.

"By more," I said. "By 998% from 47 cents in December 1997 to $5.15 in March 2000! And then by 1200% from 93 cents in April 2003 to $12.23 in January 2006!"

"But how do you know that a stock will rise again when it is already -80% down?" asked Iain.

"You don't," I replied. "Look what happened to Lehman Brothers. If you are using active timing, then your predetermined technical analysis timing criteria will combine to provide you with a call to action to re-enter the stock when its price starts rising again, thereby taking a risk that the pre-tested entry criteria, based on probabilities, might be correct on this occasion. When you do re-enter you predefine the precise maximum risk to take at that time which is the exit that you will act on if the stock falls below that exact maximum-risk price."

"How do you determine the exact timing criteria?" asked Iain.

"With thousands of hours of research," I replied. "This is what we do at Share Wealth Systems in our systems and product development."

"But you still don't know whether the entry and exit will result in profit." said Iain.

"There is no certainty on *each* market entry," I said. "But with well researched precise entry and exit criteria you can determine the existence of an edge and thereby can create certainty over a large sample of trades. Again, more on that later."

"If you do so much research why can't every trade be a winner?" asked Iain.

"My, don't human beings crave certainty in an uncertain world. Look at it this way. There is a risk and reward equation that is continuously running within the markets. There are ***millions of variables, all out of your control and all interacting simultaneously*** within the financial markets. They ***impact each other and each financial instrument by varying degrees of magnitude at any given time. It can take just one of these many variables to affect your position in the market negatively at any given time, but you will never know in advance which variable that might be.*** This is one of the fundamental truisms of financial markets."

I continued, "And these variables don't even have to be in the financial arena to negatively affect your position. It could be a terrorist attack or a natural disaster. That's why one of the guiding principles that I use in my investing is 'anything can happen.' It was one of the key points in the book *Trading in the Zone* by Mark Douglas."

"What do you mean by this?" asked Iain.

"Every time I find myself ***becoming biased*** due to an external influence from the market. Or I start ***assuming in advance*** that the markets might react in a certain way to some news or some upcoming event. Or I start ***expecting a particular outcome***. I say to myself, '***anything can happen***.'"

"This brings me back to the current moment and reminds me not to assume any projected outcome into the future but just to accept whatever happens as it is. Which allows me to react in the moment according to the pre-specified precise process that I have researched and pre-written into my Investment Plan away from the heat of the market. It prevents me from allowing biased expectation or external surmise to override my pre-specified process."

"It humbles me into accepting that there are more variables at play than I can possibly be aware of or understand and that these variables can have varying degrees of effect in any given situation at any given time. Thinking 'anything can happen' helps me execute my plan as it is intended."

"I don't have to get to that level of skill, do I?" asked Iain.

"Not if you use the first simple strategy that we will start discussing soon," I said. "However, if you want to invest with approaches that are more active, then you will have to gain these skills to some degree."

I sensed that Iain was a little stunned about what he might be getting himself into so I reassured him, "I'm discussing this only to position the strategy that you should use. It won't need this level of skill. There are other strategies that you may consider if you wish to do even better with your investing."

Iain asked another question, "How do we know whether the start of any particular fall isn't the beginning of the stock's price never recovering again."

"The short answer is we don't!" I replied. "Eastman Kodak was a Dow Jones index component for seventy-four years until 2004, but technology disrupted its business. The leadership team didn't react as it should have at the time; as we now know with the luxury of hindsight. The change in technology was a single variable that had a huge effect on Kodak that nobody saw coming at the time. Similarly, in the late 1890s and early 1900s railroad companies dominated the Dow Jones index. Then Henry Ford started mass producing motor cars and the Wright brothers invented flight."

"I continued, "Research in Motion's share price (stock code RIMM, which they renamed to BBRY in 2013), rocketed when Blackberry phones were the fad, as did Nokia's. But then along came the iPhone and Samsung's offerings."

"Have a look at BBRY's share price in Chart 8-8. Nokia doesn't exist anymore."

Printed with permission from Beyond Charts Chart 8-8

"***Each significant fall in a stock's price starts off being a small decline.*** Objective investors don't fall in love with individual stocks and treat each fall in each stock the same. They subscribe to the belief that 'anything can happen' and manage their investing in a consistent manner."

"My goal for doing the Lehman's case study and of looking at a few stocks' history is to provide a big picture perspective on how stock prices and indices can and do move. What we know from history is that stocks of all shapes and sizes will continue to experience big down periods from time to time for reasons that only become apparent after the fact. What we don't know in advance is what will cause these declines in any given situation, how big the declines will be and how long each down period will last."

I summarized, "That's why we have to ***create objective and consistent risk management processes that minimize the financial damage*** that comes from these negative periods in the market. While simultaneously taking risk to generate returns that outperform inflation, taxes, and other asset classes to meet our investing mission, goals, and objectives."

"However, hundreds of stocks also experience massive rises and hence present tremendous opportunities that are simply not available in other investing asset classes."

Long-term Active Investing

"Explaining the buy-and-hold approach and how stocks move provides an excellent background to other stock portfolio approaches. The second category of managing a stock portfolio is what I call *long-term active investing*."

"I haven't questioned what 'long-term' means so far as I have assumed it to be many years. But what do you mean by 'long-term' here?" asked Iain.

"I'm referring to the average hold period for each position in the market from entry to the exit of that position. Average hold periods longer than four months for each position are what I call *long-term active investing*; one to four-month average hold periods are *medium-term active investing*; average hold periods of less than one month I call *short-term trading*."

"Aren't those average hold periods a bit short for long and medium-term?" asked Iain. "My impression was that mutual funds refer to long-term as being longer than five years or even longer?"

"Agreed," I said. "But that refers more to the period that the funds would like you to leave your money invested with them rather than the average hold period for any positions that they might have in their portfolios. ***Average hold periods have more to do with the way that stocks move than with individuals' investment horizons for all their investment capital.*** Remember how many falls of at least -15% 3M, IBM, and Apple had? There would be many more -7% to -10% falls and as an active medium-term investor using technical analysis, exit signals will be generated on falls of less -7% which reduces the average hold period to less than four months. I have gone to pains to show you this because this is just how the market moves."

"Ok, I get it," said Iain. "So 'term' should be defined by the market, not by what the financial industry wants everyday investors to believe as their investment horizon for all their capital?"

"Correct," I answered. "It's up to us to fit in with how the market moves, not to try to shoehorn the market to how you want it to behave."

"How is *long-term active investing* different from the buy-and-hold approach?" asked Iain.

"By definition, it is ***active*** investing because timing is used to sell; and then timing is used to buy a different stock. Being long-term, the average hold period of a stock position would typically be from around two months to eighteen months. Some positions may be held for years if the long-term trend continues to rise or track sideways, but doesn't fall too much. Long-term timing systems would give any particular stock's price quite a lot of room to fall without selling, but the price could eventually fall to a point that generates an exit."

"Like the Lehman Brothers example. This sounds like a more logical strategy than buy-and-hold forever," said Iain. "How does this approach perform compared to buying-and-holding the indices that we looked at with the SPIVA® Scorecard?" Iain added.

"Good questions," I replied. "All approaches or strategies should be measured against the indices and more appropriately, the Total Return indices, or Accumulation indices as they are called in other countries. But why would you compare to the market indices and not some other benchmark?" I tested Iain.

"Because index performance plus dividends is available to every ordinary investor with minimal effort who manages their own investments," retorted Iain. "You haven't yet told me how to do this."

"Good, just checking your understanding. In due course, I'll give you the precise, simple steps to do this." I replied.

"To answer your questions about comparative performance, we've demonstrated this with our research. We'll look at the performance of a system a little later after I've explained the primary approaches that an investor can deploy in the stock market."

"Long-term active investing with stocks is not time intensive if you use a system that only requires around an hour a month after you've learned the basics."

"What skills does an investor need for this approach?" asked Iain.

"This is where the choice of analysis approach can make a big difference," I replied. "Let's head off on a tangent for a bit."

Fundamental analysis and technical analysis

"A period of a few weeks to a few years is required to attain the necessary expertise to become an active investor. This depends on which analysis and skills acquisition path is taken, which, in turn, depends on what an investor is trying to achieve, and how frequently they wish to interact with the market. The two main choices of analysis are fundamental analysis, or value investing, and technical analysis, either separately or together."

"This is beginning to sound like a lot of learning and effort," Iain said.

"I guess you can't have a mindset that says I don't ever want to learn anything about investing. Everybody that works for a living needs to learn something about finance and investing at some stage because ***everybody that contributes to a retirement nest egg is an investor***. Once you accept this, you just have to decide to put in a little time and effort that can potentially make a difference of several hundred thousands of dollars over twenty, thirty or forty years."

Iain jumped in quickly, "Alright, I'll say it before you do. I remember how startled I was when we did the calculation of how far I'd be behind by staying with my 401(k) Plan if it continued to underperform one of the Total Return indices."

"Exactly, you have to ***keep hanging onto that thought to motivate you to find a better way***," I said. "Now back to the two main types of analysis, fundamental and technical."

"Will I HAVE to learn either of these to match the S&P400 Total Return Index?" asked Iain.

"To match the index you won't HAVE to, but either could help you do better than the index with a little effort and understanding of analysis and investing psychology," I replied.

"Fundamental analysis is a method of determining the intrinsic value and strength of a listed stock by researching and analyzing many ratios from the current and historical Balance Sheets and Profit & Loss Statements of the stock. Based on this method an analyst will determine whether the current stock price of a listed company is under or overvalued compared to the company's intrinsic value."

I added, "Investors can also apply fundamental analysis to commodities and Forex, but would analyze a different set of fundamental data in these instances. Gold stocks require analysis of different ratios to industrial or financial stocks."

"That sounds like a lot of learning, research, time and effort," said Iain.

"No doubt about that," I said. "I spent years learning and researching fundamental analysis."

"Technical analysis, also called charting, is a method of determining what the probability is of the current stock price or security such as a commodity, rising or falling based on its recent and long-term price and volume movements. Patterns in price, volume and volatility form on charts, showing trends and support and resistance zones. These patterns allow the analyst to form a view on the probability of the direction of the security's price continuing or changing."

"Which do you prefer?" asked Iain.

"Technical analysis, even though I started out as a fundamental analyst," I responded. "***Firstly***, there are simply more factors and variables that affect the movement of any given stock's price than merely its intrinsic value. Most variables are extrinsic factors. After more than a quarter of a century researching financial markets, I believe these extrinsic variables have more of an impact on a listed company's stock price than its intrinsic value, especially when markets are full or fear and are falling."

"What is an example of an extrinsic factor?" asked Iain.

"Remember we spoke of the millions of variables that interact on the financial markets at any given time?" I replied.

"Yes," said Iain.

"Well, each one of those is an extrinsic variable. Examples are: interest rates, foreign exchange rate movements, natural disasters - such as tsunamis, wars, senior executive announcements, terrorist attacks, sudden and surprising change in government policies, government body approvals - such as the FDA or other agencies, peer company announcements in the same sector, industrial accidents, large individual and business speculators, corruption, country or regional issues, shock company reports contrary to current intrinsic value, industrial relations and HR disputes; and many more."

"Technical analysis looks only at the price and volume movement which, in any given moment, reacts to every publicly known and unknown (to the public) variable in real time; **meaning that price movement has built into it all intrinsic and extrinsic variables thereby aggregating all opinion about the prospects for a stock**."

"Fundamental analysis focuses only on intrinsic value data input, most of which is reported quarterly or even bi-annually in most countries meaning that there are substantial time lags between important and relevant input data with which to determine intrinsic value."

"What caused those big drops in 3M, IBM, and Apple? Were they intrinsic or extrinsic variables?" Iain asked.

"Great question!" I exclaimed. "Without looking at each decline, I would say some causes were intrinsic value changes, such as profit downgrades. But big falls would also have occurred when the intrinsic values were solid but ***market risk***, being the primary extrinsic criterion, was high across the market, so all stock prices fell big percentages."

I added, "I can assure you that ***'market risk' is the biggest risk that all stocks face regardless of their intrinsic values and the one main risk for which fundamental analysis of intrinsic stock value cannot account***."

I continued, "Some say that technical analysts try to predict price movement. I disagree strongly. ***Technical analysts try to react to price movements in an objective manner accepting that sharp downwards or upwards price action can occur at any given time for some reason. The reason is not important, just the price movement is***."

"That makes sense," said Iain.

"The ***second*** reason that I prefer technical analysis to fundamental analysis is that I have found it to be more useful and objective input to quantitative analysis, which involves statistical analysis of many technical patterns that provides the investor with a set of unambiguous probability guidelines within which to make decisions in an unemotional way."

"What does that mean?" said Iain.

"It may sound complicated to the untrained ear but to a researcher of probabilities the statistical outcome derived from historical data is priceless," I said. "The timing that I will show you is based on doing just this."

"The ***third*** major reason I prefer technical analysis is that once you have a trained eye, it is quite simple, by spending a few seconds looking at a chart, to form a view of any price movement in market indices, commodities, futures contracts, Forex pairs, individual stocks or bonds. It is far harder to do this with fundamental analysis for various markets that require different fundamental data inputs and different fundamental analysis techniques for each. It also takes lots of time to prepare fundamental data which consists of many numbers that are only updated quarterly or biannually from company reports."

"Why then did you spend all that time learning fundamental analysis?" asked Iain.

"I read a book about fundamental analysis of stocks that was published in the mid-1980s and, as often happens, my view became biased by my initial entry into investing which became fundamental analysis of stocks."

"What do you mean by 'often happens'?" asked Iain.

"For example, if your first entry into investing is Forex trading then it is highly likely you will view all investing through the prism of Forex trading. If you start out in futures trading, you will evaluate all other instruments and strategies through that lens."

"I used to discern all things to do with investing through the prism of fundamental analysis; until I broadened my view by looking at many other analysis and investment approaches. I then evaluated each of them objectively in relation to what I was trying to achieve within the constraints of time availability, available capital, the frequency of data provision and what risks I was prepared to take to achieve my growth objectives with particular baskets of my capital."

"Besides, in the late 1980s, there were many books on fundamental analysis and very few on technical analysis. In fact, technical analysis was considered taboo and perceived as sorcery! Although there were books available on technical analysis of stocks and commodities written as far back as the 1920s, they certainly were not mainstream reading and were difficult to find at the time with no online searching or Amazon available."

"Do you feel frustrated that you wasted many years before finding your focus?" asked Iain.

"I have no regrets about the years I spent researching and using fundamental analysis since it has helped me enormously to position these two primary methods of analysis with respect to my investing objectives. There is undoubtedly a place for fundamental analysis for those who prefer value investing. But my preference is to ***use a single analysis approach with the single input of price to form a view*** on the effect of all extrinsic variables - such as stock indices, currencies, interest rates, bonds and commodity prices - on the stocks and instruments in which I actively invest."

I added, "But I don't necessarily stop reading or researching any particular method or approach. For example, nearly a decade after I ceased any major research using fundamental analysis, I read a new edition of a great book called *What Works on Wall Street*' by James O'Shaunessey, a well-known Wall Street proponent of researching and executing in the market based on value investing, or fundamental analysis."

I continued, "Being the prolific researcher that he is, O'Shaunessey objectively investigates statistical outcomes of applying various fundamental criteria, which is quantitative analysis. He also objectively studies statistical outcomes using only price momentum. One of the strongest chapters in his book is on the merits of price momentum as measured purely by price movement, which is a technical analysis technique."

James O'Shaunessey states[2], *"For now, we see that relative strength is among the only pure growth factors that actually beats the market consistently, and by a wide margin."*

"And that's from a fundamental analysis investor!" exclaimed Iain.

"Precisely," I said, "But having given pure price momentum a huge rap, he does combine price momentum with fundamental analysis, or value investing, in his strategies. At the end of his book where he ranks the different strategies, he makes a profound statement that confirms all the research that I have done over the last quarter of a century and what I consider another market principle. He states:

"This study of 44 years of monthly data proves that the market follows a purposeful stride, not a random walk. The stock market consistently rewards some strategies and consistently punishes others. The strategies found near the top or the bottom of our list all possess similar attributes that are easily identified. Each of the ten best-performing strategies, for example, includes relative strength criteria."

"He calls it 'relative strength' and you call it 'price momentum.' Which is it?"" asked Iain.

[2] *What Works on Wall Street*' Edition 4 by James O'Shaunessey, Chapter 20

"He uses both terms interchangeably in the book, but relative strength is a particular technique within the set of techniques that fall into the wider arena of price momentum, all within the spectrum of technical analysis."

"What do you suggest I focus on?" asked Iain.

"You should first focus on what I should have done when I initially started investing in 1990 - develop an Investment Plan with a clear investing mission and objectives. Compiling an Investment Plan helps determine the path of analysis on which you might focus. Do you have such a plan?" I asked Iain.

"No," he replied. "But I do have a good idea of what I want to try to achieve."

"Unfortunately 'an idea' is not good enough," I said. "I suggest that you focus on writing an Investment Plan before starting any investing. It has to be committed in writing. When we get to the mechanics of creating one, I'll give you a complete and operational Investment Plan that you can maintain and update from then on."

Medium-term Active Investing

"Thanks. Where to next?" asked Iain.

"The next approach is *medium-term active investing* of a stock portfolio in which you could be managing between seven and twenty-five open positions."

Medium-term active investing requires more effort and time than longer term active investing, around one to two hours a week after you've mastered the core competencies. Daily attention is needed to manage an active medium-term portfolio."

"It can take a few weeks to a few years to attain these medium-term active investing skills depending on whether investors can find an existing investing methodology that works for them or whether they need to research a strategy for themselves from scratch."

"What's involved with researching my own strategy?" asked Iain.

"A few thousand hours spent researching and back-testing various price pattern concepts and principles through computer programs and the careful evaluation of statistical output. Then using relatively sophisticated software simulation tools to stress-test these patterns through historical portfolio simulations."

"Not for me. I've already got a job!" exclaimed Iain.

I smiled, "It is not for the fainthearted, but it can be rewarding, incredibly insightful and greatly assist with successful investing. Many thousands of people around the world do embark on this journey. However, having done intensive research such as this since the early 1990's and interacted with many investors who have tried, I know that few people who embark on the process of designing their own system see it through to completion and actual execution in the market."

"That applies to the longer term active investing approach as well, regarding finding a researched strategy that works for you or putting in the time and effort to do the research yourself."

"Back to medium-term active investing. The shorter the term over which you trade, the sharper your active investment psychology skills need to be. These are skills that you have to learn - you don't just have them naturally."

"Why?" asked Iain. "I'm an educated guy who's been around a while and has been in business. Surely I'll have the necessary mental skills to handle medium-term active investing?"

"Don't get me started," I said. "I could spend weeks coaching you on trading psychology, and we would only scratch the surface of the topic. For the time being, just accept that to get your trading thinking in sync with the market you would need to think with an entirely different mindset from what you have attained through tertiary education and working in business or elsewhere. All of your experience to date has programmed you to think in a way that is the antithesis of how you need to think to be a consistently successful active investor. We'll cover this in more detail towards the end of our time together."

"Why are you taking me down this path? Will I need to retrain my mind to do what you are going to suggest?" asked Iain.

"Not at all," I replied. "The way forward that I will suggest will be very simple compared to medium-term active investing that we are discussing here. But you may still choose to take on the challenge of using a more active approach such as this in the future. That's up to you. It's an incredible educational journey if you do but one that requires simpler strategies to be used first before you embark on it."

"Why do people even embark on a medium-term active investing approach?" asked Iain.

"Because medium-term active investing turns over the same capital more often and hence achieves more compounding. Compounding is the holy grail of investing. Medium-term active investing compounding produces growth more quickly than long-term active investing. And this is where, with today's lower transaction costs, people who can execute medium-term active investing well, with method and mindset, can be very profitable and grow their capital at a much faster rate over the long term."

"I'll leave medium-term active investing alone for the time being," Iain said cautiously.

"That's exactly what I recommend you do, given your situation," I concluded.

[Note: Readers that are interested in medium-term active investing can refer to the Appendices in this book on more active investing strategies.]

Short-term Trading

"The last area of stock market approaches that we will discuss is *short-term trading*. Note that I use the word 'trading' and not 'active investment' with short-term strategies. Short-term trading requires at least one to a few hours a day, and even sharper mental skills to consistently, objectively and successfully make profits. Gaining the necessary skills can take many years, and in fact, maybe even decades, depending on the level of activity and fervor with which you approach short-term trading."

"Short-term traders typically start moving towards using leverage, or margin, and margin instruments such as futures, Forex, CFDs and shorting. Everything that I said about the skills required for medium-term active investing grows exponentially the shorter the term of your trading, leading even into intraday trading."

"I don't think that I'll be doing that," said Iain.

I concluded, "All of these approaches work depending on the quality of research and criteria used to determine the timing of entry and exit. They also depend greatly on successfully applying two areas of active investing that I haven't even mentioned in any detail yet - risk management and trade size for each position opened in the market, also called money management or position sizing. Both of these are hugely important especially for medium-term and short-term active trading."

"My business, Share Wealth Systems, and I have invested heavily in researching and compiling robust risk and money management rules for medium-term active investing. We don't provide short-term trading strategies."

I continued, "These more active approaches are dependent ultimately on the time you have available, your skills and how much preparation you've done in creating or finding a method and then being able to repeatedly execute that strategy consistently and objectively."

"That sounds like running a business," said Iain.

"It is," I said. "And that is exactly the problem for individuals who hear about fantastic returns that can be made by actively trading the financial markets in the short term. You should conduct active investing as you would carry out a business, but active investors don't see it this way in the beginning. They think that it can be a non-intrusive adjunct to their already busy lives, and the profits will simply flow in. However, it takes a lot more than this, which I hopefully have now helped you appreciate."

"Now, with all of the instruments and active investing stock picking approaches out of the way, I'm going to get to the crux of the book; index investing."

Index Investing

"To put your mind at ease after covering these active approaches, which may appear to be rather onerous, I repeat, none of it is necessary to be able to match the market indices. And hence beat around 85% of active mutual funds over six years and more, and nearly all active mutual funds over longer investing horizons. The approach that we are going to cover now is the start of what we'll be discussing in our sessions from now on."

"An index investing approach does not require the intense time requirements or mental skills necessary with the more active strategies.
All everyday investors should build the backbone of their retirement investing portfolios using index investing.
Index investing should become the core component."

"Okay," said Iain, "I'll refocus. But remind me why you explained all these other instruments and approaches?"

"You need to understand the spectrum of other ways to appreciate where an index investing approach fits compared to these various other methods and instruments that are available. With the full picture that you now have, you have an anchor point from which to establish your investing focus. You'll need to keep this in mind when you get emails from leveraged trading organizations such as Forex, binary spread providers and short-term options trading educators who do an enormous amount of marketing."

"I get it," said Iain.

"Good, let's start by looking at what an index is. An index comprises a subset of stocks listed on a particular stock exchange that is deemed to be representative of how that whole stock exchange is performing."

I continued, "Index custodians calculate a stock market index by selecting a limited number of stocks whose total number is a subset of all the stocks listed on that stock exchange. They call these listed companies 'index constituents.' An index can consist of twenty to 3000 constituents. An index is typically used to provide an objective measurement of how the overall market is doing and, therefore, is a benchmark against which investors can compare the performance of active mutual funds, individual stocks and their portfolios."

"Like the S&P500, S&P MidCap 400, Dow Jones Industrial Average or NASDAQ 100," volunteered Iain.

I responded, "It's important to know that index custodians do not use a buy-and-hold approach in compiling, calculating and maintaining which stocks are constituents in a stock market index."

"Why is that important?" asked Iain.

"If the index custodians used a buy-and-hold approach, then every single stock that had ever been a constituent in an index would remain in the value calculation of the index, even those that are no longer listed or have fallen out of favor over the years."

I showed Iain Chart 8-9, which shows roughly the number of new companies that had been included in the S&P500 each year since 1965, and by default, the number that had also been removed from the S&P500 index each year.

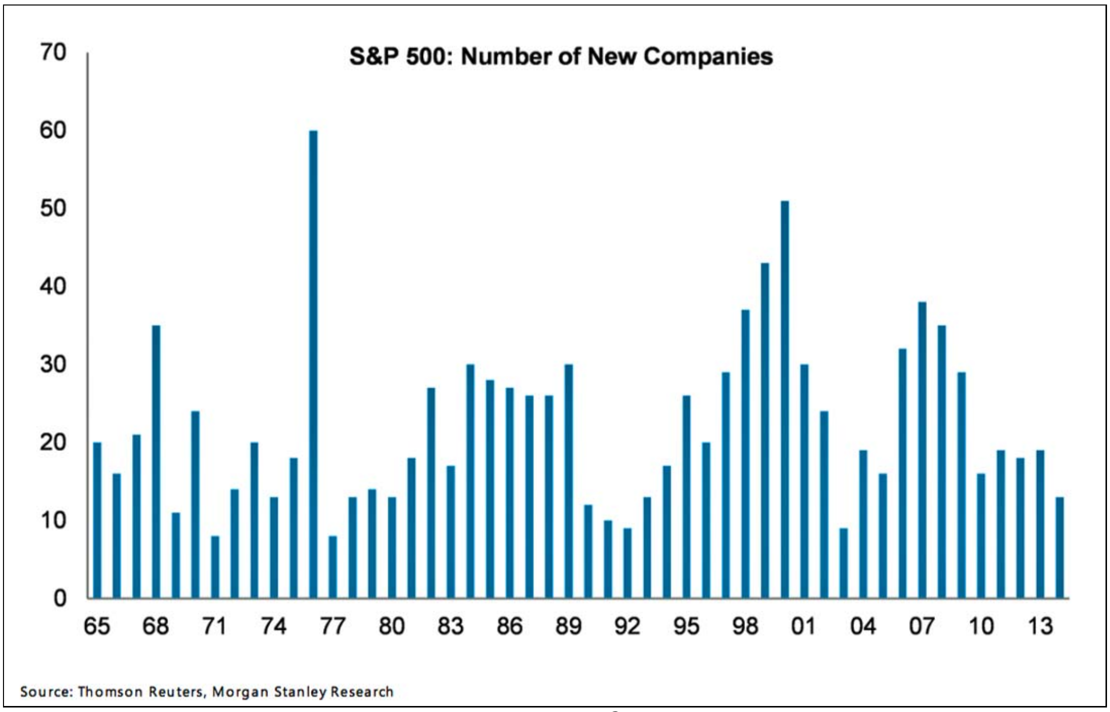


Chart 8-9[3]

An index may be made up of, say, the top 500 stocks. Broadly speaking, if one or a few of these stocks perform poorly over time and are 'punished' by investors selling them, their price

[3] Source: Thomson Reuters, Morgan Stanley Research

and market capitalization will fall. If the capitalization falls far enough, it could fall below that of a stock outside the top 500. When this happens, they will change places.

"I understand," said Iain, "indices only have constituents that have performed better than others that are not in the index."

"That's right. As we have discussed, this is called ***'survivorship bias'*** and gives stock market indices a long-term upward bias," I confirmed. "But over the long term, it would be possible for an index to have a downward bias if every past constituent was calculated into an index on a buy-and-hold basis (which it isn't). At the very best that index would probably not have risen at the same rate that it has and hence be below the current level of the S&P500."

"I didn't realize that there was so much movement of stocks in and out of an index," said Iain. "This means that 'timing' is being used in the construction of a stock market index."

"Correct," I said. "The market capitalization of stocks primarily determines the timing of when to include or exclude stocks from an index, as the stocks rise and fall. The market capitalization is the number of outstanding shares multiplied by the current stock price. If a stock's price increases, so does its market capitalization, and vice versa."

"So the S&P500 is made up of the five hundred stocks that have the highest market capitalizations?" asked Iain.

"Essentially yes," I responded. "It's important to note that the removal and addition of stocks is not based on an intrinsic value of the listed company even though that may have played a role in the company's market capitalization rising."

"So it is based on the price movement of the stock, not fundamental analysis?" said Iain.

"Mostly yes," I replied. "And because businesses that are growing concerns that provide products and services make up an index, over the long term there is an upward bias in indices from the organic growth of growing populations and inflation."

Iain added, "And when you combine this with our other discussions about the SPIVA® Scorecard, indices beat just about every active mutual fund over six years or more. ***So why not just find a way to buy the index?"***

"Exactly," I said. "You've got it. Index investing is a bone fide simple alternative to selecting stocks in a portfolio or, more importantly, to investing in active mutual funds of any kind."

"Remember I asked you in an earlier session what is the most well-known and proven investment strategy available?"

"Yes," said Iain, "and the answer was the S&P500 index."

"Correct," I said. "This was recognized by a select few in the early 1970s and marked the start of index investing with index mutual funds. Their charter was to track an index, such as the S&P500 index, as closely as possible, to match the index, not to outperform it like active mutual funds try to do. A pioneer of index mutual funds was the founder of Vanguard, John Bogle, whom I have quoted a few times now."

I continued, "Then in the early 1990s, the concept of listing an index mutual fund on the stock exchange came to fruition. Rather than having to complete a prospectus and post it with money to an index mutual fund manager, the actual fund was listed on the stock exchange, meaning that anyone could invest in the index fund, in the same way as a stock is bought and sold on the stock market. These funds were named Exchange Traded Funds, or ETFs."

"An index ETF is an index mutual fund that is listed on the stock exchange."

"Is it that simple?" asked Iain.

"It certainly is. But be careful - there are many other ETFs listed on the stock exchange that are effectively boutique active mutual funds that don't try to track an index, they still try to outperform the indices. They are called 'active ETFs.' View these in the same way as those active mutual funds that the SPIVA® Scorecard measures against the indices and that underperform the indices over the long term."

"Index investing is one approach that I'm going to suggest you use. Primarily, we're going to use index investing strategies that can be executed in ten to fifteen minutes a quarter, a month or a week, depending on the strategy. This approach is far less time consuming than an active stock portfolio and way, way less than any of those other strategies that we have spoken of that use options, futures, foreign exchange, spread betting, etc."

"We will not only be able to match the index but outperform the indices that the active mutual funds cannot match, let alone beat, over the long term. And, we'll take less risk than the active mutual funds, Target Date funds, and Balanced Funds."

"We are going to discuss a few simple strategies that range ***from purely buying and holding an index*** and thereby nearly matching what an index achieves - such as the S&P500, S&P400 or S&P600 - to ***using timing to avoid sitting through steep bear markets. This way you can get ahead of the index by a substantial percentage each time that a major bear market occurs***."

Iain replied, "I can see the benefits of buy-and-hold index investing, but I get the feeling that the way to make significant and lasting effects is to use timing if it only takes a few minutes each week to ensure that an investor misses a major portion of any declining market period."

"Correct," I said. "If you summarize the essence of the advice from many financial advisors, you'll be told three things about investing for your retirement:

- Spend some time working out asset allocation across two or more asset classes depending on age and tolerance for risk,
- Rebalance between asset classes as the market dictates, and
- Minimize percentage based recurring and trailing costs as much as possible."

"But that would require lots of vigilance and ongoing actions," said Iain. "And how would I know what my tolerance for risk is at any given time of my life without testing it? That is a hard question to answer. How would I know what allocation of rebalancing to do and to which asset classes? What criteria would I use to figure out when to rebalance and by how much to rebalance? This just sounds like a complicated and confusing way of managing risk! Or financial advisors justifying that I have to use their services which would probably also include a juicy FuM fee."

I could sense Iain's frustration, again.

"Does another way resonate with you?" I asked.

"If I can focus on only one or two things to do on a regular basis that doesn't take much time, I think that I can fit that into my life. If timing as a risk management strategy is as easy as you say, then I guess I could do it, but I need first to see the process," said Iain.

He continued, "At the beginning of our sessions you said that I could potentially accumulate more than $800,000 extra over the next twenty years by focusing on a single index compared to staying invested in a Balanced Fund. Did you use timing in that scenario?"

"No, I didn't. Timing would provide an even better result," I replied. "I have actually shown you how to achieve the $800,000 difference, but I'll explain the specifics that apply to your situation shortly."

I continued, "First, I'm going to show you how buying and holding an index ETF outperforms the balanced active mutual funds and then I'll introduce timing on index ETFs to really show the advantages of missing those best and worst days in the market."

Last Word:

- **There are investing instruments and strategies that are not relevant to ordinary investors growing a nest egg for retirement but are valid trading instruments for shorter term leveraged trading. These include:**
  - **Exchange Traded Options, or Options**
  - **Futures**
  - **Forex**
  - **Spread-betting**
  - **Contracts for Difference (CFDs).**

- **Stocks investing and trading approaches include:**
  - **Buy-and-hold portfolios**
  - **Long-term active investing**
  - **Medium-term active investing**
  - **Short-term trading**

- **When considering a potential investing strategy for retirement, always ask, "Would *I invest all or most of my retirement monies with this method?*"**

- **If you are trading with leveraged instruments suited to time-intensive short-term trading, what strategies are you using for your more important long-term retirement nest egg?**

- **Index investing is a valid method for growing a retirement nest egg.**
  - **Exchange Traded Funds (ETFs) are the easiest and most cost-effective way of deploying index investing.**
  - **ETFs should be a core component of every investor's retirement nest egg.**