



Chapter 6: Why the stock market?

"... the real risks in the long run are the risks of inflation and excessive caution."

Charles D Ellis¹

Iain asked, "Before you answer those questions about asset classes, let's discuss the most basic level of investing so I can understand why I don't just leave my money in the bank to earn interest. Why take on the risk of investing in the stock market or any other asset classes?"

He continued, "Nearly every week I read how much riskier the stock market is whether it is in the doldrums or is rocketing upward. When it's down, everybody points out the billions that have been wiped out in losses, and when it's up, most commentary is about how it can't keep going up and big losses are just around the corner!"

"You have summed it up well," I said, "As the sayings go, 'bear markets slide down a slope of hope.' and 'bull markets climb a wall of worry.' But you won't improve your lot by swaying with the opinions of commentators on a day by day basis. You need to keep a big picture perspective based on facts and research, not biased opinions or un-researched views from those who need to fill their columns with content and who know that bad news sells."

"Let's get back to some objectivity," I said. "Look at facts and probabilities. Let's start at the beginning and ask what the problem is that you're trying to solve?"

Iain replied. "Well, people need to plan to save and invest for when their income from working stops, so they have to make a decision one way or another with what to do with their investments."

"Exactly," I said. "Workers contribute every month to a retirement fund of some sort and hence are investors. They can't do nothing simply because they have no financial experience and because it seems too hard. They are investors by default through their 401(k) contributions and must take responsibility to make investment decisions whether they like it or not."

I continued, "They often say that buying a house will be the biggest financial decision that people will ever make. This statement is often thrown around in the financial media because if your mortgage repayment interest rate is slightly higher than another lender's, you could be paying thousands more in interest payments over the life of your mortgage, which is

¹ Charles D Ellis, page 52 of his book "Winning the Loser's Game"

typically decades. However, how you invest your retirement savings can have an even bigger impact on your finances than which lender you chose for your mortgage. Hence, this is a far more significant financial decision than buying a house."

I explained why this is so:

- Not everyone buys a house in their lifetime, but everyone who works must make a financial decision on how and where to invest their monthly retirement contributions.
- Over a lifetime the cost of making the wrong decision about retirement investing can have more significant consequences in absolute dollar terms than buying a house with a slightly higher mortgage interest rate.

"Please explain that statement," said Iain, "When I bought my house, I had to make a large down payment, far greater than the amount of my initial retirement nest egg."

"Sure," I said, "Simply put, it's not the size of the original investment that counts more, it's the **size of the dollar differential between one decision and another** that determines the level of importance. You may pay a little bit higher interest rate on a mortgage from one lender to another, and this will mean more in absolute dollars paid out in interest payments over two to three decades, perhaps costing a few tens of thousands of dollars more. However when it comes to a retirement nest egg, the choice to invest in a fund that **underperforms** at a rate of 2%, 3.5%, 4% or even 5% compounded per year, **can leave retirees with many hundreds of thousands of dollars less when they reach retirement. Even over a million dollars less.**"

"In short, you have to figure out a strategy that doesn't consume you and that allows your retirement nest egg to grow at its greatest potential."

"People get confused with all the jargon, the choices and the opinions, mostly biased, when they are looking for some guidance. Resulting in frustration and confusion and them taking the easy way out by merely checking off a box on a form and hoping they've made a reasonable decision."

I continued, "But what I'm going to show you with evidence is that by doing this they definitely will forfeit at least many hundreds of thousands of dollars towards their retirement, depending on their age."

"You keep saying that, and I've seen the spreadsheet that we did after I had read that article in the *New York Times*, but **why** could it potentially cost me that much?" asked Iain.

***"What the stock market indices achieve over the long term is what is AVAILABLE for YOU.
As I have shown, nearly EVERY investing alternative via active mutual funds falls short of what's available from the stock market over the long term."***

I added, "That answers your question about why you should use a stock market index as a benchmark for returns because that is what is available from the investing domain as a whole,"

"What other investing asset classes are there in which to invest?" asked Iain.

"Firstly we'll discuss why the active mutual funds continue to use other asset classes then we'll look at the asset classes in which an everyday investor can invest directly."

Diversifying across Different Asset Classes

"We've covered diversification in our Balanced Funds discussion."

"Yes," said Iain. "This is what Balanced Funds, Target Date funds, and portfolio managers do across asset classes. We saw that it has a 'diworsification' effect by retarding growth over the long term and agreed that it better-suited investment horizons of three to seven years, not twenty to forty years."

"There is also diversification within a *single* asset class of, say, the stock market, by holding many stocks to spread risk across various businesses and different sectors so that if some fall others may rise to neutralize those that fell. Active equity mutual funds do this."

"Isn't this also what an index does?" asked Iain.

"Yes," I said. "It is time to raise one of the biggest problems with diversifying across one asset class. It doesn't address **market risk**; also called systematic risk. When the market has a big fall, nearly all stocks decline, regardless of an individual stock's fundamental strength or the market sector to which it belongs. **Market risk is one of, if not, THE biggest risks that investors face with their investing.**"

"Is that why active mutual funds spread their funds into other asset classes?" asked Iain.

"Correct," I said. "But this doesn't solve the problem because other asset classes fall too in severe bear markets, not by as much as stocks, but they do fall by decent percentages."

I continued, "In 2008, the stock market decline was -56%. When we were discussing Target Date funds, we looked at large bond funds that fell between -30% and -37% in 2008. Residential and commercial property fell large percentages too, excluding leverage."

I showed Iain Chart 6-1, a chart of a different bond fund this time to the one that we looked at when we were discussing Target Date funds. This time, I showed him the Fidelity Capital & Income fund (FAGIX) that has \$10 billion net assets and invests around 72% in bonds, mainly corporate, 18% in stocks and the rest in cash. The drawdown in FAGIX was -37% during the 2008 bear market and -29.9% during the 2000 to 2002 bear market.

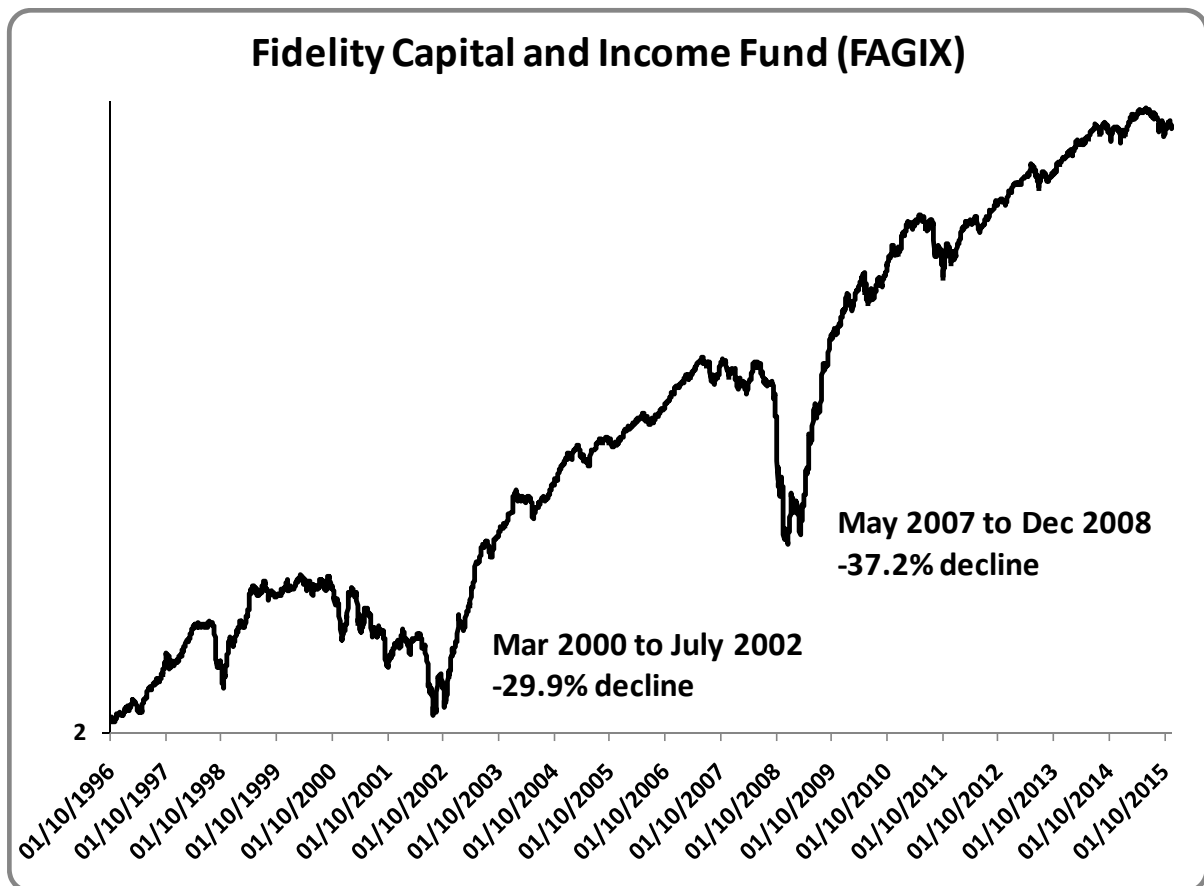


Chart 6-1

Charts 6-2 and 6-3 show how poorly the S&P residential, -72.56%, and commercial property, -78.34%, indices fared in 2008.



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Chart 6-2

"Surely -72.56% doesn't reflect how much residential property values declined for individuals?" asked Iain.

I responded, "It won't be for people who own their property outright without any bank loans. However, assume that you bought a property for \$1,000,000, and it declines -30%, which is what happened in many cities in the U.S. in 2008."

"And assume that you have \$400,000 equity and have a bank loan for the remaining \$600,000. A -30% decline of \$300,000 (assuming the property was worth the original \$1,000,000 purchase price just before the drop) will be against YOUR equity which means your \$400,000 investment will fall to \$100,000, or a -75% decline. Most people forget about the leverage that is inherent in residential property ownership."



Printed with permission from Beyond Charts

Chart 6-3

"There are two other S&P500 commercial real estate indices, the S&P500 Retail Real Estate Investment Trusts index and the S&P500 Real Estate Management Development index, which suffered drawdowns of -88% and -93.9%, respectively!"

"Those are serious declines in bond and property indices. How does diversifying into other asset classes help?" asked Iain.

"Most of the time it does help, but it does not eliminate a decline in value of an investment portfolio. It does buffer the fall to reduce the overall adverse effect compared to investing all of your capital in just the single asset class of the stock market. However, diversifying across multiple asset classes seldom helps in severe bear markets when nearly all asset classes available to ordinary investors can fall. And of course, nobody knows in advance whether all asset classes will fall or not, or by how much if they do."

I continued, "Essentially they use ***diversifying across multiple asset classes as a risk management tool*** to limit a fall in the value of their fund if a bear market occurs in the foreseeable future."

Iain asked, "But when the stock market is rising, aren't other asset classes a drag on the Balanced Funds and Target Date funds' performance?"

"Yes," I said.

Iain was still a little puzzled. "All the evidence from the SPIVA® Scorecard demonstrates that just holding the index would do better than diversifying across other asset classes even with the bigger falls that the stock indices experience."

"Exactly," I said. "An analogy would be driving a motor car with one foot on the brake ALL the time in case a 'crash' situation arises instead of **only** applying the footbrake when needed."

"So why do they diversify into other asset classes?" he asked.

"Think about it," I replied. "What is the mutual fund's core business? How is their core revenue generated?"

"I guess their core revenue comes from fees. But that's acceptable since they are helping their customers grow their capital," Iain answered.

"That is true. They are, to a degree. However, if genuinely growth were the sole purpose for all mutual funds, they would merely become a fund that tracks indices. Because, as we have seen in Chapter 1 with the *New York Times* article and Chapter 2 with the SPIVA® ScoreCard, stock market indices outperform nearly ALL active mutual funds over rolling periods of around six years and more."

"If the core revenue of all mutual funds comes from fees then it just makes sense for them to raise as much capital as possible to be invested in their fund. That way, the absolute amount of fees they receive continues to scale up as they increase the absolute size of their funds under management (FuM). Because all mutual funds charge fees in percent of FuM, not on a cost-plus basis. The key to their business, therefore, is to increase the size of their FuM."

"They also know that the most likely reason for investors to redeem their holdings is volatility, which is primarily linked to how much the unit price for their fund falls during down market periods. Diversifying into lower performing asset classes that don't decline by as much as the stock market indices during severe down periods buffers the fall compared to the stock market, and reduces volatility overall thereby lessen the likelihood of their customers leaving them."

"What the SPIVA® Scorecard demonstrates though is that **the vehicle with the highest probability of better long-term investment returns is not active equities or balanced funds, but funds that track an index.**"

Iain had been listening intently, "It appears that active mutual funds have to put more importance on buffering declines than maximizing rises and therefore returns."

"Yes," I said, "but they are merely responding to the whims of their customers, who, with all due respect to them, don't really understand. And they will not since very few spend much time understanding this to the degree that they should, as it is such an important aspect of their lives."

I continued, "Ordinary investors' understanding is typically limited to what the active mutual funds say through advertising and misinformation in their marketing. If everyday investors learned more about investing by reading more books or used a mentor, this mightn't be the case."

*"The fund managers are caught between a rock and hard place;
they have to juggle what they know against what their customers don't know
in such a way that they can still provide sufficiently favorable returns"*

to retain most of their customers but not stifle gains to the extent that they are uncompetitive or just do not meet their charter."

"Tough gig trying to please all the people all the time," said Iain. "I am beginning to see the struggle that the active fund managers face."

I continued, "The *perceived* need to reduce volatility plays into the hands of the active Balanced and Target Date funds. It helps them justify **charging fees to balance and rebalance the invested capital. It pays more for them to be excessively cautious and be seen to be doing something – to be 'actively managing' your money rather than doing nothing.** But unfortunately, the payment of fees to the mutual funds costs the investor directly in these fees and indirectly even more in the lost compounding of returns."

"It's all making sense," said Iain. "To divert from the discussion slightly, why do some boutique money managers outperform the indices and why don't I try to find one of them?"

I responded, "They outperform because their approach is similar to what I've started to show you and will continue to explain. Essentially the boutique active fund managers ensure that they remain agile, nimble and don't get too large to be constrained by liquidity. They stay small enough to liquidate their holding in individual stocks or their entire portfolio and not have to diversify into other asset classes as a risk management tool."

"You mean they use market timing," asked Iain.

"Yes. And they can be very focused and become experts in the fundamentals of particular parts of the market such as health, biotech, technology or resource stocks at certain times," I replied. "For this, they usually charge higher fees and often close the fund to new clients to keep it small enough to maintain their agility and nimbleness."

"We keep coming back to timing," said Iain.

"Yes we do, and I will demonstrate clearly the value of timing from the extensive research that has been done by many others, and by myself and my team over the last twenty years."

I continued, "To answer the other part of your question about finding a few of the boutique funds that do outperform; if you do this you should be prepared to do lots of research to gain an understanding of their methodology. You'll need to understand how it works, what research they have done, how their simulations have performed, how they use leverage and how the live execution of their methodologies have performed over a range of time periods and varying market conditions."

"All that research to find a boutique fund sounds like a lot of work. I assume that this is similar to what you and your team do?" asked Iain.

"It is a lot of work and yes, this is what we do," I said. "But independent investors should be prepared to put in some work. After all, how and where they invest their retirement nest egg, as we've discussed, is probably the biggest investment decision they'll ever make. I'll show you that just a small percentage of higher compounded annual returns consistently over many years leads to a very impressive sum by the time a person reaches retirement."

"Making the time and the effort to find the outperforming boutique active mutual funds is not necessary. Everyday investors can use the probabilities from the research that has been made available from organizations such as the SPIVA® Scorecard, my company - Share Wealth Systems, and others including John Bogle and other proponents of matching the index."

"In any case, at some stage, a particular boutique fund that is doing better than the market may cease to outperform due to change of personnel, popularity and growth and therefore they will no longer be boutique. So you'd have to do all the research again, to determine the next to which to switch. And so it goes on, an active strategy in its own right."

"For example, there were boutique funds that achieved gains greater than 50% year on year in the three to four years leading up to the 2008 bear market. These boutique funds were able to use leverage in massively liquid sectors due to the primary bull market conditions. However, when the bear market arrived in 2008, some of them, still using leveraged strategies that had worked so well in the primary bull market, fell -80% to -90% when the overall market fell -56%. They gave back all their gains and more, leaving them with less than they had started with."

"What do you mean 'less than what they started with' when the fall was less than 100%? How can that be?" asked Iain.

"That's how the math works," I replied. "Here's an example. Assume that \$25,000 was invested in 2003 and had four consecutive years of 50% compounded growth. The investment value would have risen to \$126,563 after four years. Lose -85% of this investment and the value drops to \$18,984! That's why any leveraged strategy must remove profits from the strategy and place the funds into an unleveraged strategy on a continual basis. Unless the strategy deploys timing and can totally exit the market at times and move 100% into cash to avoid the possibility of such a significant decline, and then re-enter at a later date."

"Wow. And no doubt, lots of people suffered these sorts of losses in 2008?" asked Iain.

"Absolutely," I answered. "Investors became euphoric believing that the primary bull market would never end, so they continued with their leveraged strategies. It wasn't only individual investors that binged on leverage but also large mature investing companies such as Lehman Brothers and Bear Stearns, which no longer exist due to their overleveraging."

"Back to our main discussion for this session on different choices of asset class," I said. "Now to answer this for the everyday investor."

Choices of Asset Class

"There are four main categories - or asset classes - open to the everyday investor; they include the stock market and related financial markets, property, bonds, and fixed interest from cash in the bank. Typically, cash is seen as the safest and the stock market is considered the riskiest, as I showed you in Figure 3.2."

Iain confessed, "I've not invested *directly* in the stock market. I have occasionally followed a tip from pals, but I haven't done so with any consistency."

"Ah, consistency. I'll talk more about consistency," I said, "it's key. But that's for later".

"Let me take you through the four different asset classes so you can get a better perspective on the advantages and disadvantages of these investment areas for investment."

Cash and Fixed Interest

"Let's first talk about investing with cash, or fixed interest on bank deposits. Cash is perceived to be the least risky form of investing, but in fact, I believe it can be the opposite. Investing the majority of your retirement nest egg in cash pre-retirement could actually be the highest

risk asset class for long-term investing because it will reduce your buying power over the years and it simply will not grow your nest egg by enough to last through your retirement. The risk I'm referring to here is **longevity risk**."

"We have already discussed inflation. Figure 6-1 shows what inflation does to prices."

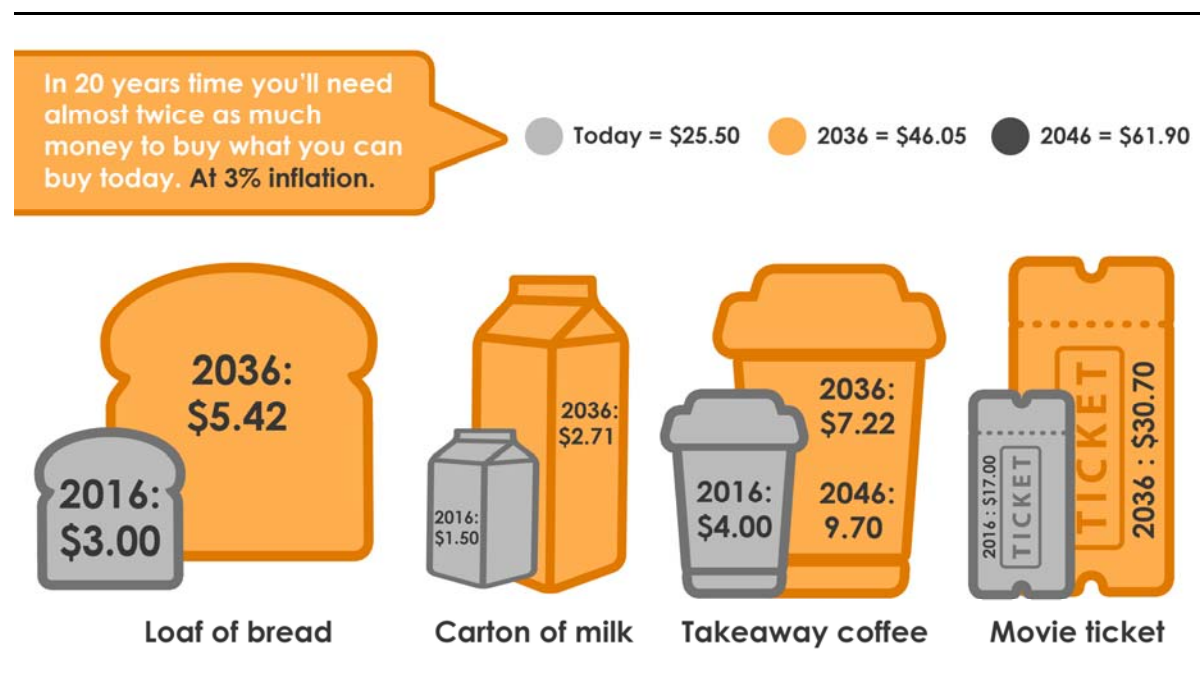


Figure 6-1

"But don't only take it from me, even the world's best-acknowledged investor, Warren Buffett, says so. His words should convince you if mine don't. Here's what he said to his shareholders²."

"Stock prices will always be far more volatile than cash-equivalent holdings. Over the long term, however, currency-denominated instruments are riskier investments – far riskier investments – than widely diversified stock portfolios that are bought over time and that are owned in a manner invoking only token fees and commissions."

"[The long-term investor's] focus should remain fixed on attaining significant gains in purchasing power over their investing lifetime. For them, a diversified equity portfolio bought over time, will prove far less risky than dollar-based securities."

I added, "Not only does he dispel cash as a long-term asset class for investing, but he also says that stocks are less risky than cash over the long term!"

"Why does he say this?" asked Iain.

"Because interest received from investing in cash over the long term, has a high probability of growing at a lower compounding rate than inflation which means a never ending decline in buyer power. Not maintaining buying power means you will not be able to afford the prices of goods in the future, as per Figure 6-1."

I continued, "The more disturbing thing about fixed interest returns on cash is that absolutely nothing can be done to overcome the downside risk of cash investing. For other types of

² Warren Buffett, 2015 Letter to Berkshire Hathaway Shareholders, page 17

investments, an investor can invest time to gain knowledge and skills to improve returns but with cash, nothing can be done. The investor is essentially powerless and HAS to accept the interest rate return from the banks at any given time, which is primarily determined by the Federal Reserve."

*"The first objective of investing over the long term for retirement is to grow your existing investments at least **at the rate than inflation, net of tax** so that you can overcome the declining value of your dollars over time."*

*"The second and more important objective is to accumulate a nest egg for the future that grows by a **lot more than inflation to have enough to last multiple years** of supporting what you want to do when you have no outside income beyond what you can draw from your retirement nest egg. **That's the challenge.**"*

"Wow," said Iain, "I hadn't thought of it that way before. I knew that cash had the lowest growth rates, but I *didn't consider the bigger picture and the loss of buying power.*"

"Don't worry," I said to Iain, "you are not alone. Most people don't fully understand the overall impact, but this is a serious issue. As life expectancy increases, people are going to need their investments to earn higher returns so that they have enough money to provide for themselves as their sole source of income for many years."

"Longevity risk rises rapidly when mainly investing in cash over the long term."

Bonds

"Most ordinary Mom and Pop retail investors don't know much about bonds as an asset class. Bonds can be used to improve fixed income returns and achieve some capital growth, although they do carry more risk than cash."

I continued, "In fact, bonds are a riskier asset class than most people think. Bond prices vary and move in the opposite direction to bond yields (the percent return realized on a bond). Think of bond yields of as 'interest rate' returns."

"When bond yields rise, bond prices fall meaning that the initial investment capital will fall in value if the bond is sold before maturity. And vice versa. Most everyday investors are invested in bonds via bond mutual funds in their 401(k) Plans."

"Also, over the long term bonds underperform the stock market. However, there are times when capital growth in bonds can be substantial, and that's typically when interest rates are falling."

I continued, "As we have already seen in our discussion about Balanced Funds and Target Date funds, there are two main types of bonds that investors can consider. One is government bonds, which are well known. Everybody talks about the 30-year U.S. Treasury or the 10-year U.S. Treasury Bond, but there are corporate bonds too, also called 'investment grade' bonds."

"Companies issue corporate bonds; typically companies listed on the stock exchange. When they issue bonds as a way to raise capital to grow their businesses they are in *debt* to the investors. The other way to raise capital is by issuing additional shares via the stock market, which dilutes existing shareholders value by selling some of the company's *equity*."

I continued, "Corporate bonds will typically provide investors with more favorable fixed income returns compared to bank interest or government bonds, but can also experience more

volatility, sometimes nearly as much as the stock market, as we discovered in our discussion in Chapter 3 about Balanced Funds. Because the fortunes of corporate bonds are linked directly to how the company performs, or the risk of default, which would mean that bond investors could potentially lose their initial investment, although this is a low probability.”

Iain recalled, “I remember the chart you showed me of the Fidelity High Income Fund, SPHIX, where it had two drawdowns of -26% and -32% during the twenty-year period beginning June 30, 1995, and ending in 2015.”

Table 6-1 shows the performance of a list of popular bond mutual funds that have a history of at least twenty-five years to June 30, 2015, compared to the mainstream stock market Total Return indices.

<u>Mutual</u>					<u>Yrs since</u>	<u>Jun 30</u>	<u>June 30</u>	<u>Jun 30</u>	<u>Jun 30</u>	<u>Jun 29</u>
<u>Fund</u>	<u>Mutual Fund Name</u>			<u>Turn-</u>	<u>Incept to</u>	<u>2010</u>	<u>2005</u>	<u>2000</u>	<u>1995</u>	<u>1990</u>
<u>Symbol</u>	<u>Index Name</u>	<u>Fees</u>	<u>FuM</u>	<u>over</u>	<u>Jun 30 '15</u>	<u>5 Yrs</u>	<u>10 Yrs</u>	<u>15 Yrs</u>	<u>20 Yrs</u>	<u>25 Yrs</u>
FAGIX	Fidelity Capital & Income	0.72%	10.2B	41%	37.7	9.77%	8.87%	8.38%	8.76%	10.21%
SPHIX	Fidelity High Income Fund	0.72%	4.7B	37%	24.8	7.79%	7.23%	6.21%	6.80%	
FSIGX	Fidelity Series Investmnt Grde	0.45%	24B	157%	6.7	3.71%				
FBIDX	Fidelity Spartan US Bond Fnd	0.22%	20.5B	75%	25.3	3.14%	4.00%	5.05%	5.34%	6.07%
FTBFX	Fidelity Total Bond Fund	0.45%	23B	140%	12.7	3.14%	5.59%			
PRHYX	T. Rowe Price High Yield	0.74%	8.6B	59%	30.5	8.64%	7.45%	7.49%	7.64%	8.27%
VWEHX	Vanguard High Yield	0.23%	17B	35%	36.5	8.20%	6.55%	6.20%	6.53%	7.61%
VFICX	Vanguard Intermediate Term	0.20%	20.9B	88%	21.7	4.94%	5.21%	6.21%	6.06%	
VIPSX	Vanguard Inflation-Protected	0.20%	22.8B	39%	15.0	3.07%	3.89%	5.13%		
VBMFX	Vanguard Total Bond Market	0.20%	147.9B	72%	28.6	3.14%	4.30%	5.18%	5.44%	6.20%
\$SPXTR	S&P500 Total Return					17.34%	7.89%	4.36%	8.91%	9.54%
\$SPXEWTR	S&P500 Equal Weight Total Return					18.42%	9.63%	9.18%	10.93%	11.48%
\$NDXTR	NASDAQ 100 Total Return					21.81%	12.41%	1.59%	11.62%	12.91%
\$MIDTR	S&P400 Mid Cap Total Return					17.82%	9.74%	9.08%	11.88%	12.23%
\$SMLTR	S&P600 Small Cap Total Return					18.44%	9.28%	9.53%	10.97%	
\$SPXATR	S&P500 Health Care Total Return					23.84%	11.27%	7.08%	12.19%	11.45%

Table 6-1

The two total U.S. bond market funds in Table 6-1 are VBMFX and FBIDX that predominantly invest in government bonds (65% to 75%), with the balance in varying ratings of corporate bonds. VIPSX invests 100% in government bonds, particularly in TIPS, which are inflation-protected government bonds. The high-income bond funds invest predominantly in corporate bonds. These are SPHIX, PRHYX, VWEHX and VFICX in Table 6-1.

I showed Iain Chart 6-4, a long-term graph comparing bond fund returns over twenty-five years from June 1990 to those of two stock market indices, the S&P500 Total Return index (\$SPXTR) and the S&P500 Equal Weight Total Return index (\$SPXEWTR).

As you might expect, the two predominantly corporate bond funds, PRHYX and VWEHX, have outperformed the two predominantly government bond funds, and the stock market indices have handsomely beaten all four bond funds from June 1990 to June 2015.

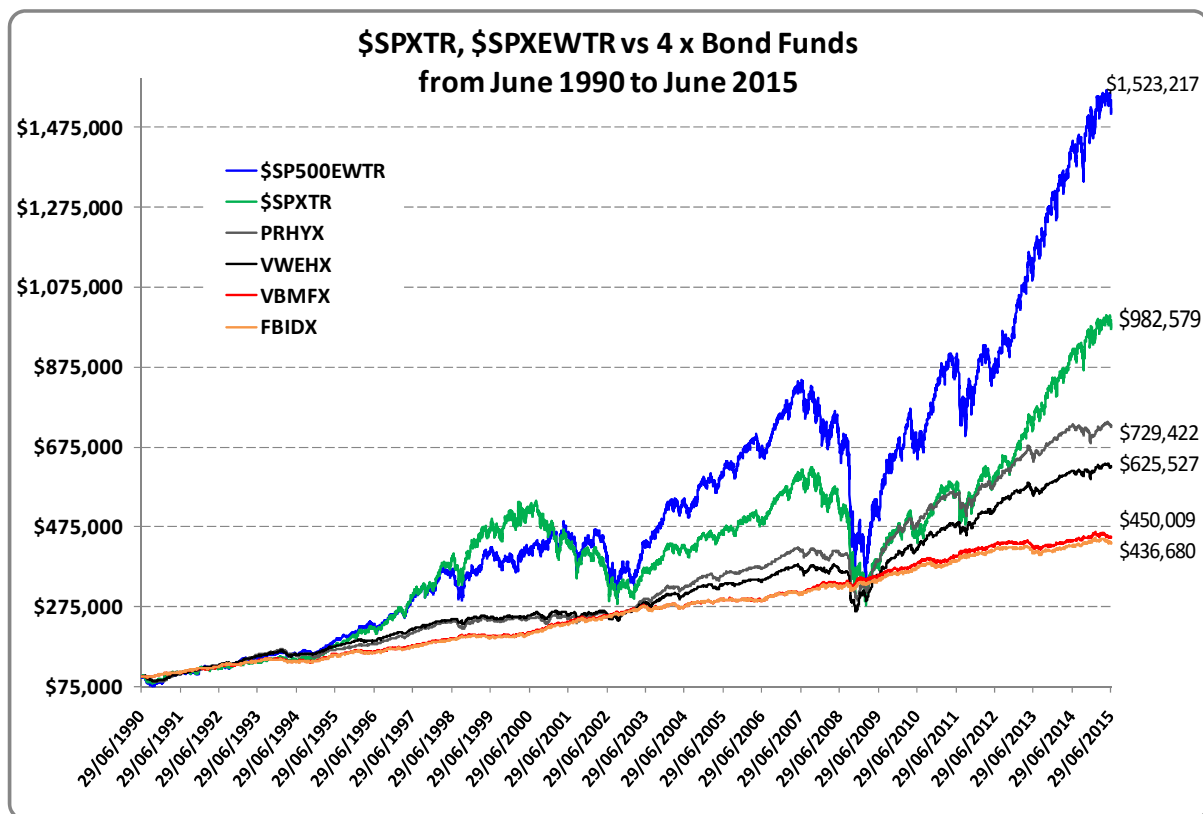


Chart 6-4

I showed Iain a semi-logarithmic scaled version of the same chart, Chart 6-5.

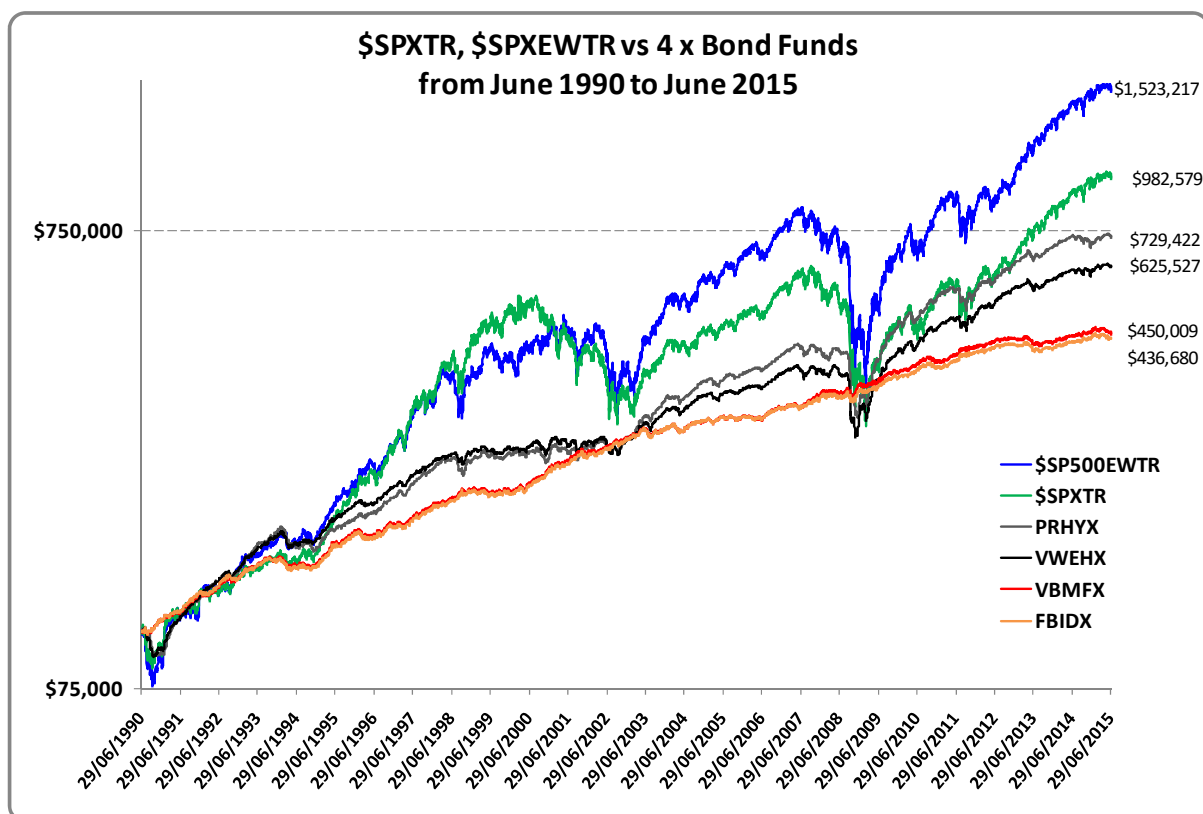


Chart 6-5

"How would the S&P MidCap 400 Total Return index have fared over this period?" wondered Iain.

"Data for the S&P MidCap 400 Total Return index back to 1990 was difficult to come by, but I do have access to data for the S&P MidCap 400 index *excluding dividends*, which was 11.03% compounded per year over the same twenty-five-year period. Extrapolating from that data shows that this index has achieved an additional 1.2% compounded per year when accounting for re-investing dividends since 1995. The assumed Total Return since 1990 could have been 11.03% plus 1.2%, or 12.23% compounded per year. Table 6-1 shows this number."

"So is the Total Return for NASDAQ100, which achieved an additional 0.68% compounded per year when accounting for reinvesting dividends, totaling 12.91% compounded per year."

"So, what was the dollar figure over twenty-five years for the S&P MidCap 400 Total Return index?" asked Iain.

"Over a quarter of a million dollars extra compared to \$SPXEWTR, or \$266,000, at \$1,789,327," I responded and showed Iain Table 6-2, where CAR% = Compounded Annual Return percent. It demonstrates that the three indices, prefixed with the '\$' sign, performed way better over twenty-five years, all starting with \$100,000.

	<u>CAR %</u>	<u>25 Years</u>
FBIDX	6.07%	\$436,680
VBMFX	6.20%	\$450,009
VWEHX	7.61%	\$625,527
PRHYX	8.27%	\$729,422
\$SPXTR	9.54%	\$982,579
\$SPXEWTR	11.48%	\$1,523,217
\$MIDTR	12.23%	\$1,789,327

Table 6-2

"What if someone invested for longer than twenty-five years?" asked Iain.

We did some calculations assuming that the funds maintained their percentage returns over the longer periods, which is a big assumption, but the principle of compounding holds.

	<u>CAR %</u>	<u>25 Years</u>	<u>30 Years</u>	<u>35 Years</u>	<u>40 Years</u>
FBIDX	6.07%	\$436,680	\$585,790	\$786,479	\$1,056,094
VBMFX	6.20%	\$450,009	\$607,715	\$820,927	\$1,109,125
VWEHX	7.61%	\$625,527	\$902,683	\$1,302,497	\$1,879,772
PRHYX	8.27%	\$729,422	\$1,084,418	\$1,613,296	\$2,400,631
\$SPXTR	9.54%	\$982,579	\$1,538,608	\$2,426,412	\$3,827,449
\$SPXEWTR	11.48%	\$1,523,217	\$2,605,219	\$4,485,354	\$7,724,643
\$MIDTR	12.23%	\$1,789,327	\$3,185,666	\$5,671,668	\$10,100,864

Table 6-3

"This shows the power of compounding your returns!" Iain exclaimed. "***Small differences in compounded annual returns make a huge difference over long periods of time. Every percent or part thereof really counts.***"

"It also shows how much compounding occurs in the last five to ten years of one's investing lifetime," I replied. "This is a crucial principle that everyday investors that are investing for the long-term, such as for, and in, retirement simply must understand. Which is why young people, who can worry the least about short-term volatility, really should be investing all their retirement savings in a stock market index."

"What is the next asset class in which an everyday investor can invest?" asked Iain.

Property

Investing in residential property is another option for people saving for retirement. Investing in commercial property is also an option, but I won't cover that here.

The points made in this section on property investment do not apply to the family primary residence as part of investing for retirement. The reason is that the \$60,000 per year required for a comfortable independent retirement assumes that the retiree owns their home outright, lives in it and does not pay for it or receive rent from it by the time retirement is reached.

Residential property is perceived to have had similar growth over the long term to the stock market. Typically, reported annual property growth is a gross return which excludes leverage, leverage costs and other expenses such as buying, selling, and maintenance costs.

When all the expenditure of the full life cycle of investing in residential property is added up, it will be discovered that these expenses are much higher than expected. So, the first point is that gross annual residential property returns may match, or even slightly better the stock market in absolute growth performance, but underperforms the stock market indices in net return over the long term.

These are important considerations when considering investing in residential property:

1. Property prices do not gyrate up and down that much over the short term, i.e. they experience low volatility. This makes it less of a challenge for most people to use property to accumulate wealth over the long term as they are:
 - a. Faced with making less investing decisions and hence making less investing mistakes.
 - b. Property prices seldom suffer significant falls such as can occur in the stock market.
2. A property investor requires a relatively large amount of starting capital for a down payment and initial costs. Investors make a down payment of around 20% to 50% of the value of the property with their own capital, meaning they have to borrow the remainder. During periods of property investing euphoria, required down payments will get down to as low as 10%, maybe less, borrowing 90%, or more!
3. Investing in residential property is typically a highly leveraged venture, typically between 2:1 and 5:1 leverage.
4. There is leverage risk; property investors borrow anywhere between 50% and 80% to invest in residential property. If property prices fall dramatically, as occurred in 2008 in the U.S., all of the investor's equity can be wiped out and indeed even go into negative equity. Meaning that the bank can own the entire property, plus more, and the investor owns none of it. Negative equity can and does happen if investors buy residential properties in the wrong locations at the wrong times, which can turn out to be enormous mistakes.

The only real way to withstand a highly leveraged property investing scenario is to hold for the long term, at least longer than ten years, and to have sufficient cash flow reserves to service the loans, even during negative equity periods.

5. A major drawback to investing in property is the high entry and exit cost. Entry costs can range from **4% to 8% of the property value** depending on government duties, bank fees, legal services, commissions, mortgage insurance, and other real estate taxes. Exit costs can be around another 1% to 3% of the property value. I will compare these costs to stock market investing costs in the next section.

Entry costs can soar to 20%, or even higher, depending on how much the down payment is, as calculated against the *down payment* for a residential investment property, being the investor's money, not the overall property value.

6. There are also **ongoing costs** for residential property investment such as mortgage interest, insurance, rates, tenant management fees and additional land taxes in some countries and states.
7. Residential property investing can also be high maintenance which can consume a lot of personal time. There is ongoing repairs and maintenance, and there is the risk of tenants damaging the property.
8. Then there is occupancy risk, meaning the investor may not have tenants on the property for periods of time, which would reduce income, which would otherwise cover some of the costs.
9. Property is illiquid; meaning it can take extended periods of time to find and buy the right property that meets an investor's investing requirements, which also consumes plenty of an investor's time. Those who have invested in property know it can take up to half a year, or even longer during strong growth periods. Furthermore, due to this illiquidity, investors wouldn't want to be forced sellers in a property decline.
10. Residential property is not divisible, meaning that you can't sell a part of a house. Property investment ties up large chunks of investing capital. Other asset classes are divisible. This forces residential property investors to borrow against the equity in existing properties to get access to capital.
11. Due to all these factors, the timing of buying and selling property is a challenging pursuit.

Holding a full-time job and managing multiple properties is challenging because you need to spend lots of time executing real estate investing. Many everyday investors have done it successfully and amassed wealth through residential property investing but also typically carry significant debt; meaning that success generally comes on the back of considerable leverage, and hence relatively high risk.

Most property investors don't take into account the cost of the time they spend:

- ***Finding investment properties,***
- ***Managing the process of buying and selling, and***
- ***Doing all the repairs and improvement work to maintain the property.***

The effort and time include meeting with property agents, checking the property, managing third-party maintenance workers, doing maintenance work yourself, checking for any damage

caused by tenants, etc. In fact, I have seen spreadsheets from residential property investors who have ***included in their property investment returns the value of their time to do all these tasks***. Over fifteen-year periods on two or three investment properties, their ***returns have been negative when accounting for all their costs***, even with decent gross growth included over the investment period.

Residential property investment requires so much time it is almost a full-time job in itself.

I summarized for Iain, "So, property investing can be riskier than most assume. Due to the high costs, being profitable is dependent on relatively high capital growth. Indeed the quoted returns for comparison purposes are almost always gross profits or based on high leverage. When investors count all of their costs objectively, including their own time for ALL activities, and calculate net returns realistically, it's certainly not as rosy a picture as everybody makes it out to be."

I continued, "However, if residential property goes through a high-growth period, particularly over a short period, say under five years, a 50% to 100% growth rate can be experienced and good profits made on a down payment, mainly due to using leverage. On the other hand, property values can also stagnate for many years. Meaning that timing can also play a huge role. And it's difficult to time such an illiquid asset effectively."

"People tell me that they are too busy to find time to investigate the SPIVA® Scorecard. How would these people buy, manage and maintain properties?"

Iain said, "Okay, I'm getting the picture. I bet most people don't even think of all these factors when they're pitched to on residential property investing."

I responded to Iain, "The key to looking at all the alternative investment processes is to be as objective as you possibly can. And when you actually execute a particular strategy in a particular asset class it has to be managed and measured objectively. Otherwise, you're going to be influenced by all the opinions and variables related to a particular investing environment."

"People battle to be objective, especially about their chosen investment paths because they want to justify their decisions and also they subconsciously exclude all the data that contravenes their choice and include all the information that supports their choice, thereby distorting their own perspective."

"I'll talk more about that over our time together because objectivity and consistency are the two key criteria required to be successful over the long term in any investing journey."

Stocks

"In my view the three previous asset classes are avenues that investors use because they don't know how to overcome the supposed risks of investing in the stock market and are bamboozled by the jargon and perceived complexity. This is a fundamental point that I want to stress. All of the risks involved with investing in the stock market and the reasons that people might diversify into cash, property, or bonds, can be overcome with tactics and strategies to minimize these risks."

"How?" asked Iain.

"The foremost approach is to adopt a long-term view and never sell. You do this by investing in a ***very low-cost instrument*** that will ***always recover*** from large stock market declines and you continually re-invest ***all dividends*** until you need them for income."

"The second approach is to use timing. Timing becomes your key **risk management technique** against large stock market declines, so you don't have to venture into these other asset classes that reduce growth."

"But everybody says that the stock market cannot be timed!" exclaimed Iain.

"Well, they're not entirely incorrect, depending on what they mean by timing. **There are degrees of timing the market.** For instance, trying to time the market on an intraday basis is tremendously challenging and is more than a full-time job. The majority of intraday timers lose money until they hone multiple skills which can take years, perhaps even decades."

I continued, "Timing on a daily basis is also tough, **but over longer term periods of a few months to many months, the probability of successfully timing the market increases significantly.**"

"There are still some caveats. For example, when timing the stock market, an investor should be able to move 100% into cash for short periods of time, for a few weeks or even months during very negative periods. Not all categories of investors can do this; the prime example being mutual funds which have billions invested in the markets and consequently must leave most of their investment in the market and ride out the negative periods."

I continued, "Let's examine some of the pros and cons of stock market investing, starting with the cons. The biggest drawback, of course, is the occurrence and fear of the big falls in the stock market. There have been several of these since the 1980s; the S&P500 has had two falls below -50% in 1987 and 2008; and two below -20% occurred in 1994 and 2002/2003. If you include the NASDAQ then -50% is nothing compared to its fall below -70% in 2001 to 2003."

"Another drawback is the random short-term volatility that plays havoc with investors' minds. Percentwise it is possible that stock markets move up or down in a day by more than interest rate returns for a whole year. This causes loss of confidence in the long-term potential of the stock market which leads to poor short-term decision-making. In reality, a little research leads to understanding that trust should always remain high for the long-term performance in the stock market."

"Let's look at the advantages of stock market investing. Here are four for starters:

1. It's highly liquid. This makes it very efficient to buy and sell.
2. It's easy to access. All that is needed is access to the internet.
3. It has a low cost of entry and exit. As I said earlier, around 0.1%, 0.2%, 0.3%, or even less than 0.1%, to \$0, depending on how much capital you invest and what commission rate you pay.
4. It outperforms all mainstream asset classes over time when you realistically take in account all costs."

"When everyday investors consider these four asset classes to invest funds outside of their retirement nest egg it invariably comes down to a choice between stocks, cash, and residential property."

"Intuitively people more easily gravitate towards bricks and mortar as it is a more tangible asset that they can see and feel in daily life. Also, the day-to-day movements in property prices are not published as stock market movements are. Consequently, investors end up checking the performance of the stocks they hold, creating knee-jerk emotional reactions to the randomness of short-term stock price movement which often end up being mistakes. This doesn't tend to happen with property investing."

For those more interested in bricks and mortar, it is interesting to make an overall comparison between investing in the stock market and investing in residential property:

- Stocks are liquid. Investors can research them in a matter of minutes with strategies discussed in this book and buy in a matter of seconds.

Residential property is illiquid and can take weeks or even months to find and buy, and just as long to sell.

- Commentators estimate that between 5% and 10% of residential properties in a city and between 70% and 80% of shares in listed companies are turned over in any given year.
- Stock dividends are paid on a bi-annual or quarterly basis and can be reinvested to achieve a compounding effect over many years by using the dividends to buy more stock.

Compounding rent in a residential investment property isn't as simple because rent is mostly used to cover costs for the investment property itself. And it will take years to build enough down payment to purchase another property purely from any surplus rent collected.

- Stocks in some countries have higher yields than residential property.
- Stocks incur one-time, low commission fees to buy and sell. Costs are as low as 0.1%, 0.2% or less if an investor uses flat rate commissions, down to 0.01%. Some stock market investing instruments are commission-free that we will be discussing in detail later.

Residential property incurs very high entry and exit costs and regular ongoing costs.

- Factor in the investor's time into maintaining an investment property and returns can fall well behind stocks. In fact, few, if any, property investors calculate and account the real dollar cost of their time spent in their residential investment property returns.
- Stocks are massively divisible and flexible; you can buy a thousand and sell one, but you can't sell one room of a house. You can buy stocks with a few hundred dollars but need tens, possibly hundreds, of thousands of dollars to enter the property market directly; and even then *only* with borrowing money.

"Stock market index returns are what are possible and are within everybody's reach. The gains achieved by the index are what they are, without variation. Index type returns with reinvested dividends net of ALL costs outperform all other asset classes over time."

"This, to answer your main question again, is why investors should use the stock market indices as the benchmark against which to measure performance and what investors must aim at to achieve the best returns that they can."

"People are conflicted because they want to achieve the stock market returns that are available, but they're fearful of the perceived risks associated with a big bear market, and this keeps them away."

"What I'm going to show you is how to achieve those stock market returns that are available to all and, in fact, even do far better than the indices and the active mutual funds."

I continued, "Our aim will be to accept what the stock market is offering us. I will show you some simple skills that require as little as fifteen minutes a week, maybe less, to achieve at least stock market benchmark returns."

"Okay," said Iain. "I'm ready for more. It's just that every time I'm away from our sessions, I slip back into my old thinking, and the fear, uncertainty, and doubt starts flooding in about directly investing in the stock market. But I am keen and eager to learn more."

"I can understand that," I said, "because it's not habitual thinking yet. You're at the stage where you have the desire, and you are starting to understand that there is another way, a better way than you have been programmed to believe."

"However, your subconscious keeps kicking in because of underperforming past experiences or anecdotal one-off stories that you've heard from other people. Well, I'm here to help you transform your thinking so you're ready to use a simple process that will achieve everything we've been discussing."

"Before we discuss different stock market approaches I'm going to destroy a myth and simultaneously set the scene for using timing."

Last Word

- **The stock market, as measured by index performance, with reinvested dividends net of all costs and without using leverage has been the best performing asset class for decades.**
- **Residential property investment net returns are much lower than the gross returns when all the costs are factored in, especially including the value of the investor's time.**
- **Interest returns from cash probably won't maintain the buying power of your investments over the long term.**
- **Active mutual funds are caught between a rock and a hard place:**
 - **People perceive the stock market as volatile, causing random short-term up and down swings in investors' nest eggs.**
 - **Investors are heavily influenced to fear and avoid volatility.**
 - **So active mutual funds:**
 - **Can't be totally out of the market when it falls because their holdings are so large that selling would cause stock markets to fall even more.**
 - **Diversify capital across other less volatile asset classes, which reduces returns.**
 - **Other asset classes all provide returns below that of the stock market with dividends reinvested.**
 - **Active mutual funds try to time the market by rebalancing between asset classes or within the same asset class, which consumes massive effort and leads to:**
 - **Increased research & analysis costs, which reduces long-term returns.**
 - **Mistakes, which reduces long-term returns.**

- The inability to make up the difference to at least match the stock market index for periods longer than six years, as proven by S&P Dow Jones SPIVA® Scorecards.
- Investors are caught between a rock and a hard place:
 - Cash is perceived to be the lowest risk because volatility is non-existent.
 - Cash is the worst performing asset class and erodes buying power over time.
 - Individuals need to take some risk but fear the volatility of the stock market.
 - Individuals default to the average middle ground and invest in active mutual funds.

You might want to read what Warren Buffett says on these points.

An important footnote quoted from Warren Buffett³, with which I agree:

"There is an important message for investors in that disparate performance between stocks and dollars. Think back to our 2011 annual report, in which we defined investing as "the transfer to others of purchasing power now with the reasoned expectation of receiving more purchasing power – after taxes have been paid on nominal gains – in the future."

The unconventional, but inescapable, conclusion to be drawn from the past fifty years is that it has been far safer to invest in a diversified collection of American businesses than to invest in securities – Treasuries, for example – whose values have been tied to American currency. That was also true in the preceding half-century, a period including the Great Depression and two world wars. Investors should heed this history. To one degree or another it is almost certain to be repeated during the next century.

*Stock prices will always be far more volatile than cash-equivalent holdings. Over the long term, however, currency-denominated instruments are riskier investments – far riskier investments – than widely-diversified stock portfolios that are bought over time and that are owned in a manner invoking only token fees and commissions. That lesson has not customarily been taught in business schools, where volatility is almost universally used as a proxy for risk. **Though this pedagogic assumption makes for easy teaching, it is dead wrong: Volatility is far from synonymous with risk. Popular formulas that equate the two terms lead students, investors and CEOs astray.***

It is true, of course, that owning equities for a day or a week or a year is far riskier (in both nominal and purchasing-power terms) than leaving funds in cash-equivalents. That is relevant to certain investors – say, investment banks – whose viability can be threatened by declines in asset prices and which might be forced to sell securities during depressed markets. Additionally, any party that might have meaningful near-term needs for funds should keep appropriate sums in Treasuries or insured bank deposits.

*For the great majority of investors, however, **who can – and should – invest with a multi-decade horizon**, quotational declines are unimportant. **Their focus should remain fixed on attaining significant gains in purchasing power over their investing lifetime. For them, a diversified equity portfolio, bought over time, will prove far less risky than dollar-based securities.***

³ Warren Buffett's 2015 Letter to Shareholders of Berkshire Hathaway, Page 17