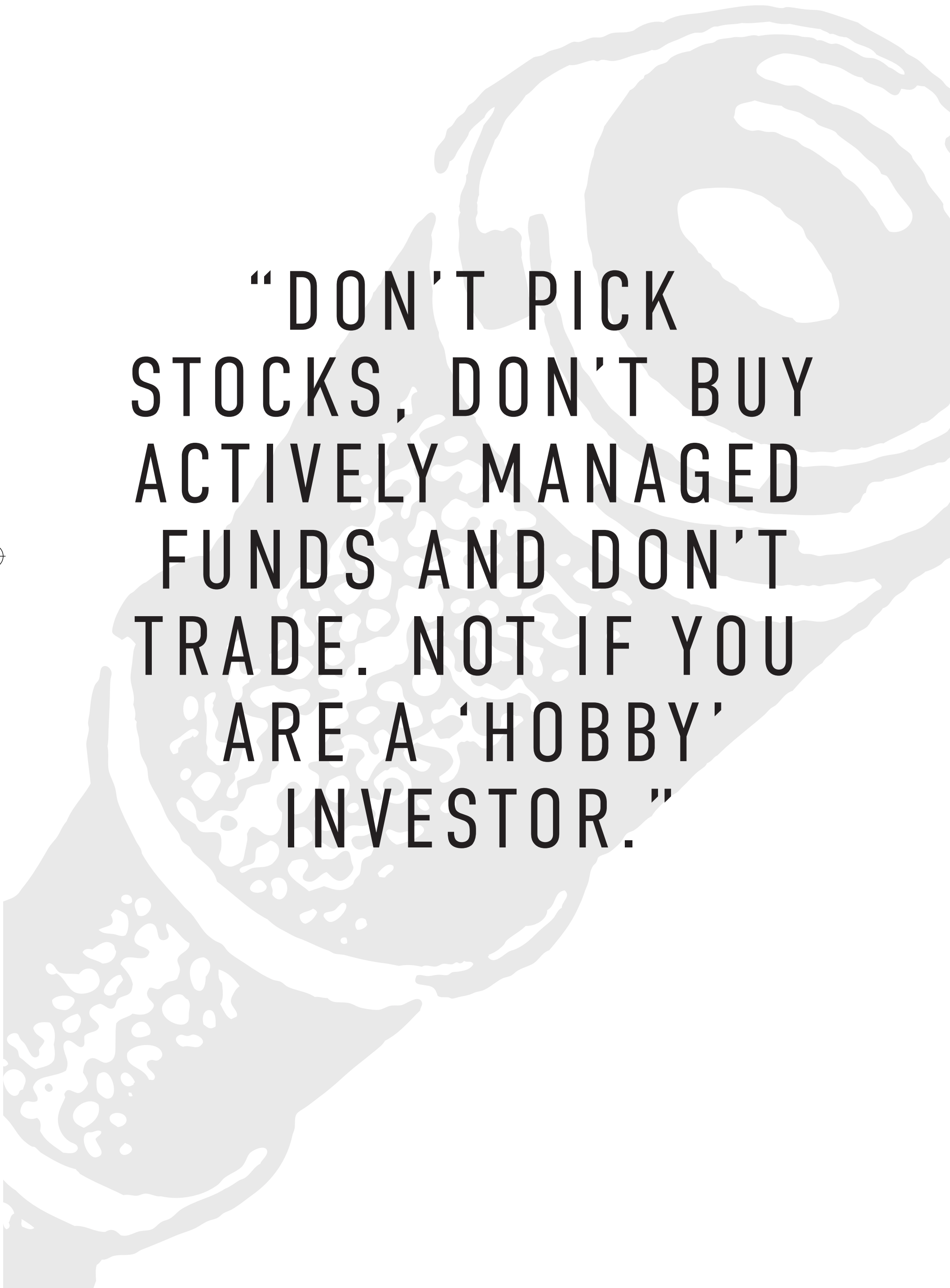
Anthony Garner

ANTHONY GARNER *is a British national based in London. He left investment banking in 1992 and since then has been trading financial markets for his own account.*

He is the author of A Practical Guide to ETF Trading Systems *(Harriman House, 2009) and has also written articles on trading and investment for a number of publications, including* Investors Chronicle.

Anthony practised as a solicitor with London law firm Slaughter and May in the early 1980s, specialising in banking and commercial law. At Swiss Bank Corporation, he produced institutional research on South East Asian stock markets including Hong Kong, Singapore and Malaysia. He spent a year in Tokyo followed by postings to Hong Kong, Singapore and Zurich covering the Asian equity markets.

In recent years his sole focus has been on quantitative, rule-based investment and most recently his interests have centered on machine learning (a branch of artificial intelligence) as applied to financial markets.



"DON'T PICK STOCKS, DON'T BUY ACTIVELY MANAGED FUNDS AND DON'T TRADE. NOT IF YOU ARE A 'HOBBY' INVESTOR."

How to use ETF Trading Systems to Outperform the Experts

1. STUDY FINANCIAL MARKET HISTORY.

You need to study history to achieve a sense of perspective, to understand what markets have achieved in the past and to divine where they might go in the future.

The following are excellent sources of deep historic data:

- www.bankofengland.co.uk/research/Pages/onebank/threecenturies.aspx
- www.econ.yale.edu/~shiller/data.htm
- www.nber.org/databases/macrohistory/contents
- fred.stlouisfed.org/categories/33060

Robert Shiller's dividend-adjusted data suggests that the compound annual growth rate (CAGR) of the US stock market since 1870 has been 8.98% and that of 10-year Treasuries 4.71%.

US Treasuries achieved a CAGR of 3.97% (from the Treasury yield culled from NBER and the Federal Reserve).

The UK stock market data from the Bank of England is not adjusted for dividends. The compound annual growth rate since 1709 is 2.55%.

The compound annual growth rate on UK bonds has been as follows:

- corporate bonds: 5.89% since 1854
- short-term prime paper: 4.17% since 1718
- long-term government bonds: 4.63% since 1753.

(I have not inflation-adjusted any of the data.)

Note for stocks the vast maximum peak to valley drawdown (80 to 90% in both the UK and US – the South Sea Bubble of 1721, the Wall Street Crash of 1929, the Nasdaq tech crash). Note the long flat periods where little growth was recorded.

As far as bonds are concerned, I was surprised by the lack of appreciable difference over the long term in short-term and long-term bond returns. Given that, I would prefer to stay at the less volatile short end of the curve.

As for where we are going, the Enlightenment, Industrial Revolution (and later the technological revolution) has driven stock prices since around 1760. There is no guarantee that growth will continue and prediction is futile. For hundreds of thousands of years, man lived as a beast and for all we know an unforeseen disaster could one day send us back to the Stone Age.

Hopefully we can expect similar growth in our investments in the future – but who can tell?

2. AVOID 'EXPERTS' AND FUND MANAGERS.

A friend asked my advice recently on a proposal he had received form a large and well-known UK wealth manager. It wanted to charge a 2% fee on his total investment simply to receive a transfer of his pension fund. Its annual management charges for choosing a bunch of funds run in any case by other firms amounted to 2.58% pa. Dwarfing the current return on bonds and for all we know on stocks as well for the next decade.

One of the world's largest banks quoted a friend of mine a 2% commission charge for dealing in US stocks when it can be done through a deep discount broker so cheap it is almost free.

As for investment advice – as Burton Malkiel argued, a monkey with a dartboard is a genius compared to most fund managers, and endless research over the past 60 years has demonstrated this amply. Don't pick stocks, don't buy actively managed funds and don't trade. Not if you are a 'hobby' investor.

Index-tracking funds are the way to go. Hats off to Vanguard and iShares and a small handful of others.

You can buy a single exchange-traded fund such as the iShares MSCI World ETF, and for annual management charges of a mere 0.5% you will be invested in almost every world stock market and thousands of shares. You will outperform the vast majority of active fund managers.

The hedge fund world is no better. Most of these Masters of the Universe eventually crash and burn, taking their clients' money with them.

The only people who make big money out of the fund management industry are the fund managers themselves. Same with the brokerage industry.

There are bright people in finance and a few have endured (skill or survivorship bias?) but eventually either their luck runs out or their returns deteriorate as the assets under management outgrow the capacity of their strategies.

There may be a case for real experts in some field who really understand a company's business to back their expertise and hold a few individual stocks. But don't bet the ranch.

3. CONDUCT RESEARCH AND BACK-TESTING.

As a stock analyst in the Far East I produced both fundamental research and technical analysis.

Looking back, it was very funny. We would stick our fingers in the air, project earnings and balance sheets a few years into the future and publish reports. We never told anyone to sell a stock – that would have been horribly bad for corporate business. Before publication, we would scurry round and look at what our competitors were saying and make sure we hadn't stuck our nose out too far.

As for technical analysis, we drew wonky lines all over the place, called them funny names and claimed they had some predictive ability.

None of us had heard of back-testing to see whether any of these ideas worked. And none of us thought of recording our advice to check whether any of it turned out to be correct. Or a load of useless garbage. I suspect it was the latter.

I produced worthy tomes on Asian-listed companies but I suspect most copies ended up in the waste bin.

You should back-test your ideas over past data.

I was recently approached by a newcomer to investment who told me he had devised a set of fundamental and technical rules.

I told him he had two choices:

- Invest in accordance with his rules and see what happens.
- Take his rules and see how their application over the past x years would have performed.

I prefer the latter approach.

Back-testing can be a very, very dangerous tool for two reasons. The first reason is that it is all too easy to keep on adding and adapting rules until it looks as if they would be hugely profitable. That may be the case – on past data. In all likelihood, such rules will be useless going forward since they have simply been fitted to the test data.

The second reason is that markets are largely unpredictable. Even more so with individual stocks. There are certain basic rules which seem to work. In technical analysis, momentum or trend following is one such approach. In terms of fundamental analysis, a stock won't increase in price over the long term unless its earnings grow and its balance sheet is sound. Tech companies have gone public over the past few decades with apparently unsustainable debts and no sign of any earnings; but they will not endure unless eventually these disadvantages are addressed.

I wouldn't do without back-testing but I expect my profits to be less and my drawdowns greater than my research suggests.

A spreadsheet is probably the best way to begin for the less technically inclined. For those with more ambition I strongly recommend learning a programming language. I am currently coding mostly in Python. Daily price data can be downloaded free from Yahoo, Google or Quandl.

4. EXPECT SURPRISES.

Nothing ever turns out as expected in life or in the markets. Just because a system appears to have worked well over the past 100 years in back-testing does not necessarily mean it will work as well over the next 100. The maximum drawdown may well exceed anything seen in back-testing. The return will entirely depend on future economic conditions.

There is little further one can say. We have no idea whether we live in a random or deterministic, Newtonian universe. We have no way of predicting the future. We can only take a probabilistic approach and hope it works.

5. DIVERSIFY.

By using index-tracking ETFs you are already most of the way there: you will avoid stock-specific risk by investing in hundreds if not thousands of individual stocks.

You cannot avoid all risks: world stock markets rise and fall together in the global economy and even commodities have become alarmingly correlated during market crises. Nonetheless, wide diversification over economies, asset classes, currencies and instruments is the best protection you can hope for. And even then, it won't help much in a meteor strike.

Don't hold everything with one fund manager or broker or bank. Don't take any single bank credit risk if you can avoid it. Avoid exchange-traded notes and stick to funds which invest in the underlying assets themselves – be that gold, oil or stocks.

Here is the real test: think back in history and consider whether you would have been smart enough to avoid its many disasters. Recall the collapse of the Russian, Argentinian and German economies in the first half of the 20th century. Remember the prolonged downturn in the Japanese stock market following an unprecedented boom in the decades after the second world war. Recall the dramatic crash in tech stocks in the early 21st century. Think about the near bankruptcies in Iceland, Ireland, Greece and Italy. Ponder the severe and prolonged downturn in commodity markets after 2008.

Take exposure to short-term bonds, world equities, cash and commodities. As well as owning your own home. There isn't much more you can do to protect yourself and your investments.

6. DON'T BOTTLE OUT.

It's no good bottling out when the going gets tough. The fear element during a market crisis and a large drawdown is terrifying. But if you are well-diversified with index, bond and commodity trackers you should just sit tight, reckon you have done your best and expect that it will turn out right in the end. Bar revolution, war or meteor strike.

Stay within your comfort zone: know yourself. Trade small and stick to a low drawdown, low volatility approach with the bulk of your assets. If you bet the ranch, if you hold everything in one risky asset, if you overextend yourself with leverage – you will surely crash and burn eventually.

7. DON'T BET THE RANCH.

Most people should avoid any sort of trading. They should simply invest in a widely diversified and low-volatility portfolio and stick with it. Apply a few very simple rules such as re-balancing.

I have traded and I do trade. Sometimes with great success and sometimes with unpleasant losses. I try to stay within my comfort zone. Betting the ranch is never advisable.

I'm currently trading the S&P 500 volatility index but in small size relative to my net worth. I am working on all sorts of exotica and have become fascinated by the prospects for artificial intelligence and machine learning. I will continue to trade in all sorts of ways and on all sorts on instruments. But I will keep it in perspective and not be lured by greed to venture outside my capacity to weather losses.

8. DEVISE A FEW SIMPLE RULES.

Many advise against market timing or the application of any 'rules'. In doing so, they fail to acknowledge (or perhaps realise) that a stock index is a rule-based trading system.

The great majority of stocks have a terminal value of zero: businesses are born, they prosper (or not) and eventually fail. The stock index by contrast is a way to profit from general economic growth. As stocks prosper, they are included in an index; as they wilt and fail they are dropped.

Individual stocks are mean-reverting: they start with a value of zero and end with a value of zero. Dust to dust, ashes to ashes.

There are countless ways to follow market trends but they all apply the same principal: run your profits and cut your losses.

The first 'system' set out below is the stock index itself – the S&P 500 Index compiled by Robert Shiller.

The second 'system' is the standard 60 / 40 split rebalanced annually. 60% S&P 500, 40% US Treasuries.

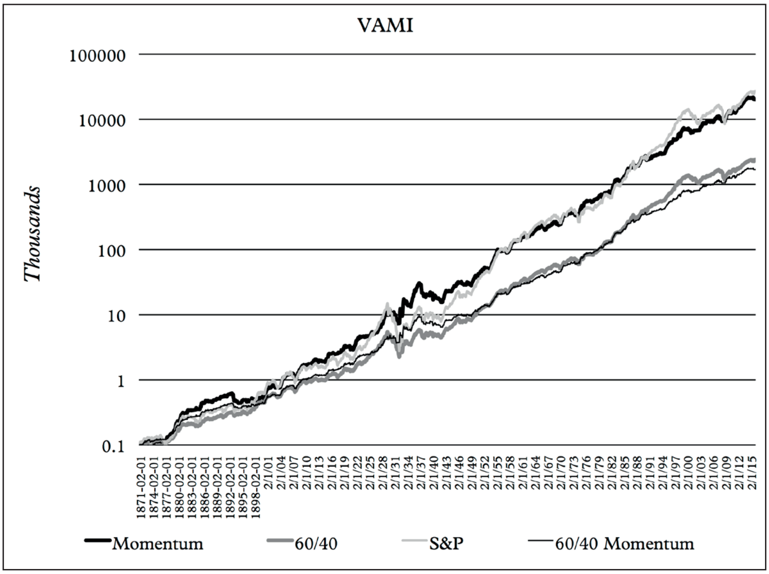
Frankly, either of these first two systems is about as good as you will get. The 60/40 split is for those who cannot stomach the gut-wrenching drawdown and volatility of pure equity investment.

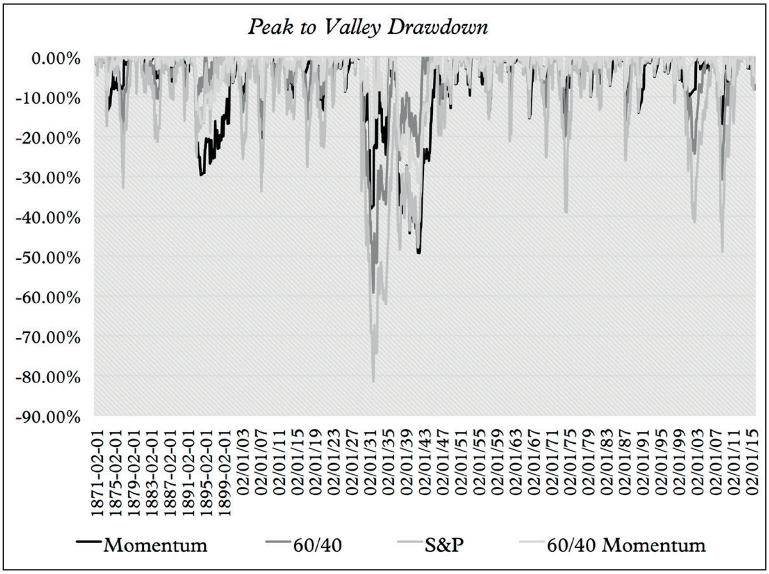
The other two systems add a gloss on each of these. 'Momentum' in these systems is the return of the S&P 500 over a one-month look-back period.

The momentum system rebalances each quarter. If the momentum is positive at the re-allocation date, invest 100% in the S&P 500, otherwise 100% in Treasuries. As you can see, in back-testing at least, the returns are similar to the S&P 500 but with greatly reduced drawdown and volatility.

The 60/40 momentum system also rebalances each quarter. If momentum is positive at the re-allocation date, invest 60% in the S&P 500 and 40% in Treasuries, if not then invest 100% in Treasuries. As can be seen, in back-testing this system achieves similar return to the 60/40 'system' but with greatly reduced drawdown and volatility.

The hope is that these systems are simple enough to prove robust and profitable in the future. But nothing in life is guaranteed.





	Momentum	60/40	S&P	60/40 Momentum
Start	1871-02-01	1871-02-01	1871-02-01	1871-02-01
End	2016-06-01	2016-06-01	2016-06-01	2016-06-01
CAGR	8.77%	7.19%	8.98%	6.93%
Max Drawdown	-49.22%	-59.21%	-81.50%	-31.76%
1Y	-4.77%	1.00%	1.42%	-2.79%
3Y (ann.)	5.41%	6.76%	10.99%	3.30%
5Y (ann.)	8.34%	7.52%	12.36%	5.05%
10Y (ann.)	8.52%	5.30%	7.43%	5.57%
Since Incep. (ann.)	8.77%	7.19%	8.98%	6.93%
Best Day	51.07%	24.95%	50.97%	30.68%
Worst Day	-14.32%	-15.95%	-26.09%	-9.47%
Monthly Vol (ann.)	11.11%	8.28%	14.07%	6.69%
Best Month	51.07%	24.95%	50.97%	30.68%
Worst Month	-14.32%	-15.95%	-26.09%	-9.47%
Best Year	47.85%	32.30%	54.23%	28.77%
Worst Year	-26.52%	-24.06%	-41.51%	-15.24%
Avg. Drawdown	-4.64%	-3.68%	-6.43%	-2.52%
Avg. Drawdown Days	237.82	188.14	238.08	188.88
Avg. Up Month	1.85%	1.85%	3.00%	1.20%
Avg. Down Month	-2.35%	-1.68%	-2.84%	-1.43%
Win Year %	73.79%	78.62%	73.10%	82.07%
Win 12m %	76.30%	76.87%	71.80%	82.87%