MISSING THE PORTFOLIO PLOT

'I HAD ALWAYS ASSUMED THAT PHYSICISTS WOULD SIT IN A DARKENED ROOM UNTIL THEY EMERGED CLUTCHING A SHEET OF PAPER THAT WOULD TOUCH ON PROBABILITY AND RANDOM MOVEMENTS AND THE LIKE'

hen my father-in-law Gareth was still alive, he would move after breakfast onto a deep armchair in the lounge with his Western Mail, and from its page of closing stock market prices work out his current wealth long-hand with pencil and paper on the back of brown envelopes. Every so often, he would shout out for my mother-in-law to bring a cup of tea or sharpen his pencil.

Then, halfway through the morning, he would transfer the results into a thick ledger that he would lock away into a black, metal box which he kept under his bed.

I have taken over Gareth's role, starting off each morning by updating Brenda's current wealth – although not from a comfy armchair but sitting on a hard one in front of my PC screen. Using a spreadsheet, I need to spend so little time on this obsessive habit that I cannot justify shouting out to my wife to bring me a cup of tea.

Thanks to the marvels of modern technology, I have built up a mass of data that lets me compare the movement of these shares against the movement on the FTSE 100 index, on the FTSE All Share index and on the Dow as well as against the movement on my own puny collection of rubbishy shares – and which finally lets me show a chart of all these movements on my screen.

This is an impressive collection of data and the chart looks really quite colourful.

My mother-in-law has a portfolio of eight shares, spread across seven market sectors (well, seven, if you reckon that Whitbread should be classed in the drinks sector, but eight if you think it belongs to pubs and restaurants). My spreadsheet works out the daily movements on each share, and arrives at a total movement. I have made an amazing discovery.

In all the years that I have updated my spreadsheet, I have never found a single day when all eight shares have moved in unison. Let's keep it simple and count a *no movement* as an *up*, so that there are only two possible movements, *up* and *down*.

A record day in the market, says the commentator, but there will always be at least one share *down*. A wave of panic selling hit the market today, says the commentator, but there will always be one share *up*. If I could understand this phenomenon, it would be like grasping options pricing theory and quantum particle theory and

DNA mapping all at once. If I cracked it, I would rush out into the street, dancing and shouting that I had discovered the Meaning Of Life.

Though maybe, I concede, it is that the portfolio is well balanced. Six of the shares, after all, have a broad link to how people behave – they paint their fences, take pills, buy houses and drink too much, and take out insurance for their old age. I admit to some doubt about the sixth company, since that life assurance company has become a general insurer, and what could be more contra-cyclical than floods down the River Severn and jumbo jets falling from the sky.

I placed a question-mark against that sixth company, but the seventh and eighth companies I reckoned were definitely contra-cyclical, a mining company and an oil firm. How people behave should not affect these last two, since they are all to do with futures pricing and exploration in cold, remote, deep parts of the world.

I decided to consult my son, the mathematician, about the mystery of why the eight shares do not move in the same direction simultaneously. Well, not exactly a mathematician, but he took a physics degree, and to a simple person – incapable of doing long division without using a calculator – mathematics and physics are more or less the same.

I was wary of asking him since I have always believed in the dictum of Warren Buffet: "Don't do equations with Greek letters in them." And I had always assumed that physicists would sit in a darkened room until they emerged clutching a sheet of paper that would touch on probability and random movements and the like. Not so. Nowadays, like everyone else, they rely on the internet, which, I suppose, had not been invented back in the days of Sir Isaac Newton.

I don't know how my son, the physicist, did it, but he managed to pluck from the internet the daily closing share prices for the eight companies, and put these onto a spreadsheet. He also added a column for each company to show whether the price had gone *up* or *down*, and then put a final column to the right to show the total of the *ups* and *downs*.

He came up with 12 instances where all the shares had moved in the same direction simultaneously. I was shocked, and persuaded myself that I could exclude *four* instances from December 1999 when the market was thin and went daft. "Was I wrong? Have I missed *eight* simultaneous movements in the same direction?" I asked in embarrassment.

"I'm afraid so," he replied, pityingly. I fell silent, since it would be shaming to have to admit that we wrinklies sometimes miss things – although *eight* is a lot of things to miss – and since I know better than to argue with the internet and my son, the physicist...

I'll bet that Gareth would never have made a mistake like that, working out his figures with a blunt pencil on the back of brown envelopes. **JF**