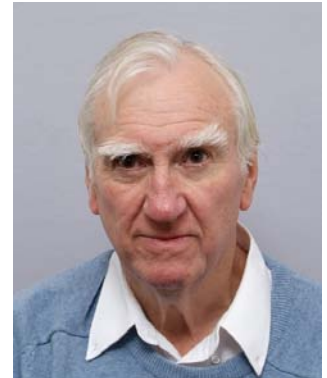


## How to assess risk

*by Malcolm Howard*

According to academic theory, risk can be split into 'market risk' and 'specific risk'. Market risk relates to the market as a whole and specific risk relates to a particular security. Academics argue that we should not worry about specific risk as this can be diversified away. The theory is that by choosing securities in different sectors and having a minimum portfolio of about thirty different shares, probability suggests that things will average out; you might have the 'rough' but you will also have the 'smooth'.



In a typical portfolio we might expect some super gains, some average gains and some losses. An example of what might be described as a 'typical' portfolio can be found in Mr Bearbull's column in the 5 January to 11 January edition of the Investors Chronicle. This portfolio shows 14 investments; 3 were brilliant (over 100% gain), 2 were good (50% to 99% gain), 5 were fine (up to 49% gain), but 4 were showing a loss. From a starting capital of £100,000 in Sept 1998, the current valuation is £315,900.

I would argue we can do better than this; the objective is to cut out the losses. With regard to 'specific' risk we can assess a high proportion of the risks we face. Specific risk can be broken down:

- High debt; false accounts, overvaluation and unforeseen events.

Running out of cash and being unable to pay your creditors is the greatest risk, as those unfortunate enough to hold Carillion plc shares found out.

The second biggest potential problem is false accounting, usually because inventories and/or debtors are overstated. In the latter case this often comes about because companies take sales too early.

Over-valuation comes about (particularly in the AIM market) because of 'momentum' investing. Here the price becomes unrealistically high, but because the price goes up, more people buy and the price goes up again. It is called a 'virtuous circle', but when this overheats it becomes a bubble. Some people make a lot of money investing in 'bubbles'; the problem is they eventually burst and then losses can be substantial.

For obvious reasons there is nothing we can do about 'unforeseen events' which come about for a variety of reasons, such as regulatory and government intervention issues.

The first test we can do is to assess whether or not the accounts are false (if they are not false the test's failure demonstrates poor management). This test is what I call my 'prime test' and is based on the fact that the Income Statement includes charges that are non-cash items such as depreciation, amortisation and share based payments.

The test is simple: 'Cash inflow from operating activities' in the Cash Flow Statement must be greater than 'Net earnings' in the Income Statement. If not the test fails; in such cases a 50% discount is applied to CEPS. In addition a 25% discount is applied to cover net debt. For example, if net debt per share was 41.6p, the CEPS would be discounted by 10.4p. CEPS is defined as 'cash earnings per share' and is calculated by taking 'Cash Inflow from operating activities, before the movement in working capital' and dividing by the number of shares, adjusted for share options. This gets what I call REPS (revised EPS). Some examples are given below:

	<u>CEPS (p)</u>	<u>Test fail (p)</u>	<u>Debt (p)</u>	<u>REPS (p)</u>	<u>Price (p)</u>	<u>P/E ratio</u>
Berkeley Group	199.8			199.8	4,119	20.6
BP	81.8		(46.6)	35.2	518	14.7
Carillion (note)	25.9	(13.0)	(10.8)	2.1	189*	90.0
Echo Energy	(1.5)			(1.5)	14	S
Halfords	45.0		(10.4)	34.6	349	10.1
IQE	3.2		(1.4)	1.8	127	70.6
Luceco	6.7	(3.4)	(5.1)	(1.8)	233*	S
Melrose	1.4		(8.5)	(7.1)	234	S
Moss Bros	12.8			12.8	67	5.2
Paddy Power	453.2		(9.0)	444.2	8,430	19.0
Savills	67.2			67.2	981	14.6
Whitbread	302.5		(108.1)	194.4	3,974	20.4

What the P/E ratios mean (prices shown are the mid-price on 18 January 2018):

\* is the price after publication of the accounts, but before the crash.

Below 9	The market believes that the company is in decline and that there will be negative growth
9-11	The market believes that the company has very little or no growth potential
12-20	The market believes that the company will grow by a reasonable amount
21-39	Annual growth between 25% and 40% expected
40+	We are in 'bubble' territory; such stocks are high risk
S	Evaluation impossible so any investment is speculative

Note: Carillion (along with a long list of companies) took part in the government's 'Early Payment Scheme'. This was designed to improve the cash flow of small businesses. Under this scheme, once a contract with Carillion was completed, the small business holder would take his authorised invoice to one of the participating banks, who would pay him in full if payment were due, or discount it if it were paid early. The banks would then recover the amount they paid from Carillion, except this company did not pay the banks back appropriately. At 31 December 2016 Carillion owed the banks £760 million with regard to this scheme, but this was shown as 'other creditors' and not 'debt'.

At the end of the day, it all comes down to personal judgement. Do you believe the P/Es are justified?