Mind Matters

The road to revulsion and the creation of value

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The inexorable march down the road to revulsion is throwing up some truly incredible investment opportunities. BAA-rated corporate bonds are now yielding the highest level since the 1930s – as Ben Graham said, corporate bonds "should be bought on a depression basis". Even in aggregate terms, equity markets are offering reasonable value. From a bottom-up perspective, great companies are available at bargain basement prices. Will I be early? Almost certainly yes. But as Jeremy Grantham noted recently, "If stocks are attractive and you don't buy and they run away, you don't just look like an idiot, you are an idiot".

- Unprecedented has become the most overused word in existence throughout this period. From our perspective the spike in market volatility is neither unprecedented nor unpredictable. Volatility spikes are not black swans, rather they occur when Mr Market goes from losing his head at the top to losing his nerve at the bottom. However, volatility has a degree of persistence. In the Great Depression volatility exploded and remained exceptionally high until well into the recovery!

- Perhaps the only solace to investors is that the road to revulsion ends in an investment nirvana – unambiguously cheap assets. The latest addition to the portfolio of deep-value opportunities comes from fixed-income land. The yields on BAA-rated bonds are pricing an environment akin to the 1930. Senior secured debt is available for 50-70c on the dollar.

- Equity markets are also offering opportunities. Even at the market level, equities are looking attractive. The US is trading on a Graham and Dodd PE of 15x, against an average of 18x since 1871. The UK is trading on 12x such a measure, against 16x since 1927. Could markets go lower? Of course. But from a long-term perspective they are attractive!

- Whilst this may not be the 1930s, it is informative to see what happened to drag markets down to their all-time lows. Mapped onto today, the 1930s would require (reported) earnings to halve from current levels. Of course, equities are a claim on long-term cash flows, and as such very little of their value comes from the near term (less than 10% in a typical DCF), so if markets did follow the 1930s example, it would be a generational opportunity to buy.

- From a bottom-up perspective, the opportunities are even more compelling. In Europe and the UK nearly one in ten stocks is passing our augmented Ben Graham screen. In Japan and Asia one in five stocks is passing the screen! Even 15 stocks within the S&P500 are showing up as deep-value opportunities (a full list appears on page 12 onwards). Some have argued that value stocks did particularly poorly during the Great Depression. The data show that they did no better or worse than other equities but did eventually rebound faster.

- Perhaps it is time to reintroduce the late, great Bob Kirby's idea of the coffee can portfolio – a basket of stocks that one would be happy to hide under the mattress and forget about. Of course, such an approach requires a long time horizon. Sadly, the institutional imperative to perform on all time horizons combined with the mad world of modern risk management hamper most investors' abilities to exploit the opportunities.

The road to revulsion and the creation of value

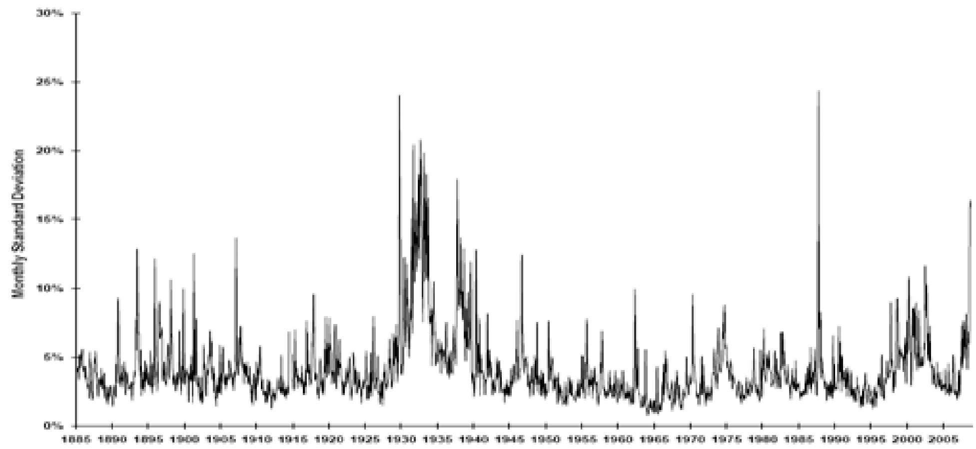
We seem to be marching inexorably down the road to revulsion (that final stage of a debubbling process) which terminates in a loathing of the assets in question and is characterized by unambiguously cheap asset prices (effectively my idea of heaven). My strategy for surviving this environment has been a barbell of deep-value opportunities presented by Mr Market during his depressive phases, and cash. The aim is to slowly drip feed the cash into the deep-value end of the barbell each time I can find some compelling opportunities. I recently supplemented this with some cheap inflation insurance (via TIPS and Gold). Given the gyrations we have observed I thought it was worthwhile revisiting these elements.

Volatility – not unprecedented nor unpredictable

Unprecedented has become perhaps the most overused term in existence. However, the recent spike in volatility is neither unprecedented nor unpredictable. As the chart below shows volatility has certainly been higher in the past. The volatility spikes are not black swan events (see Mind Matters, 13 March 2008); rather they are all too predictable – the result of exceedingly expensive equity markets receiving a reality check on their wildly optimistic assumptions. Effectively they occur when Mr Market goes from losing his head at the top to losing his nerve at the bottom.

It is also notable that volatility has a degree of persistence in the historical data. That is high volatility often follows high volatility. In the period of the Great Depression volatility exploded and remained high until well into the recovery. Now not even my good friend and colleague, Albert Edwards expects our current woes to be as bad as the 1930s! He recently wrote “Many dismiss comparisons with the Great Depression. I agree. The unfolding downturn won’t be as bad”, but he did go on to say that this is likely to be “the next best (worst?) thing” (see Global Strategy Weekly, 5 November 2008) Those looking for rapid declines in volatility may well be disappointed.

Volatility – here to stay?



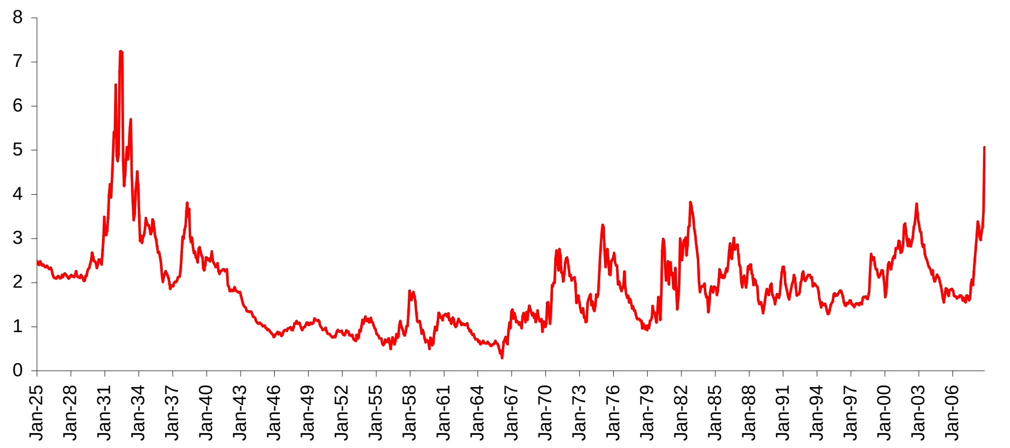
Source: Schwert, SG Global Strategy Research

The creation of value I – Debt markets

The good news from my perspective is that the higher volatility remains, and the lower the markets head, the greater the scale of the value opportunity that is created. A recent addition to the portfolio of deep-value opportunities comes in the form of the corporate bond and distressed debt markets. Friends who are far more expert in this field than I, tell me that senior secured debt is available at 50-70c on the dollar. As this stands amongst the highest rated claims in the event of a bankruptcy there is a good chance you will get a full dollar back.

Corporate bonds look as if they are pricing in an environment akin to the 1930s. The spread between BAA and US treasuries is as high as it has been since the Great Depression. Currently it stands at over 550bp, at the depths of the Depression it was just over 700bp. This level of spread sits well with Ben Graham's advice that "Bonds should be bought on a depression basis".

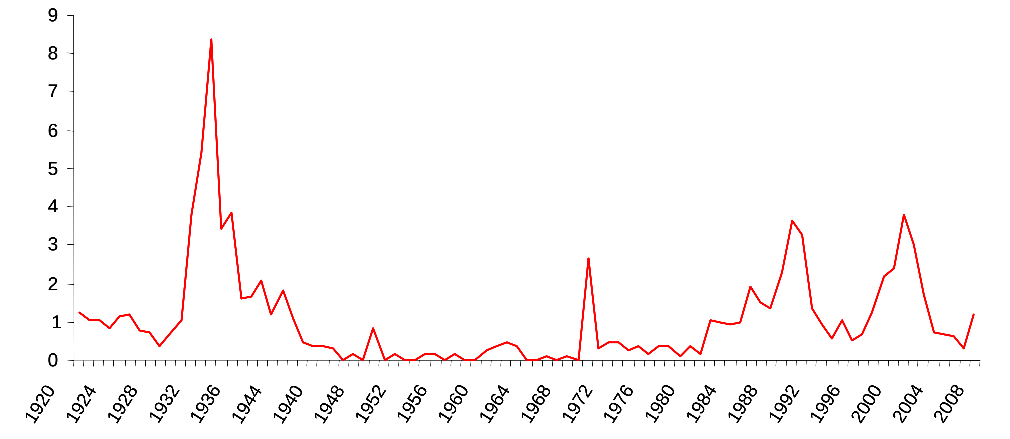
BAA spread over treasuries



Source: SG Global Strategy Research

The current spread suggests that the corporate bond market is pricing the highest default rate since the Great Depression – in line with Albert's view expressed above.

Default rate across all grades (%)



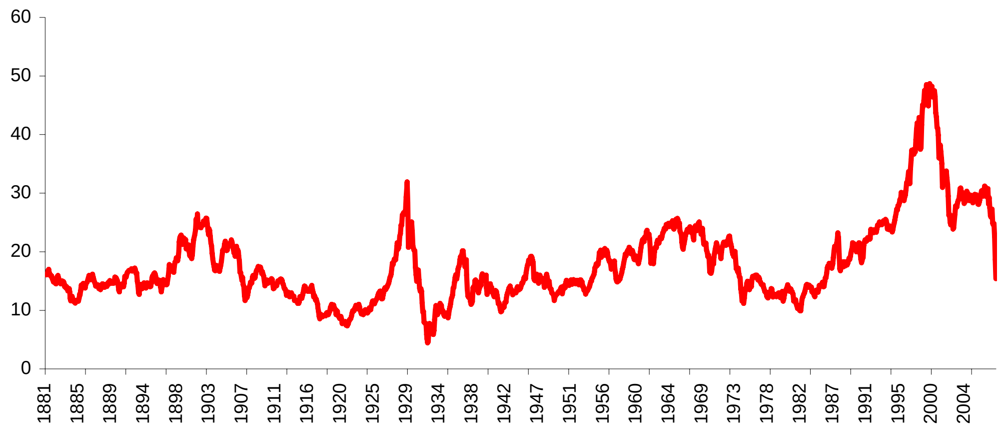
Source: Moody's

The creation of value II – Equity markets

As regular readers will know, the way I tend to look at valuations is to use cyclically adjusted valuation measures such as the Graham and Dodd PE (current price over a ten-year moving average of earnings). The chart below shows the long-term picture for the US. The speed of the adjustment is really quite breathtaking.

The S&P500 is currently trading on 15.4x this measure. The average since 1881 is 18x including the bubble years, and 16x if we exclude the bubble. So US equities are now on the distinctly cheap side even in aggregate! I wasn't sure I would ever actually get to write those words!

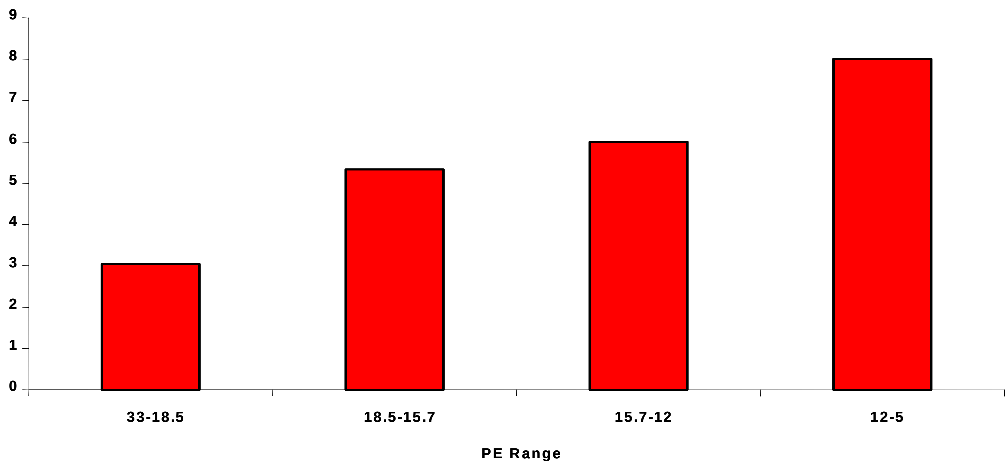
S&P500 Graham and Dodd PE (X)



Source: SG Global Strategy Research

As I have often stressed in the past, valuations really don't matter for short-term returns. However, they are the primary determinant of long-term returns. The chart below shows the average 10-year real return achieved depending upon the starting Graham and Dodd PE. Today's market valuation puts us in the third column from the left – above average returns, but not yet in the realm of the truly bargain basement.

10-year real returns delivered depending upon starting Graham and Dodd PE



Source: SG Global Strategy Research

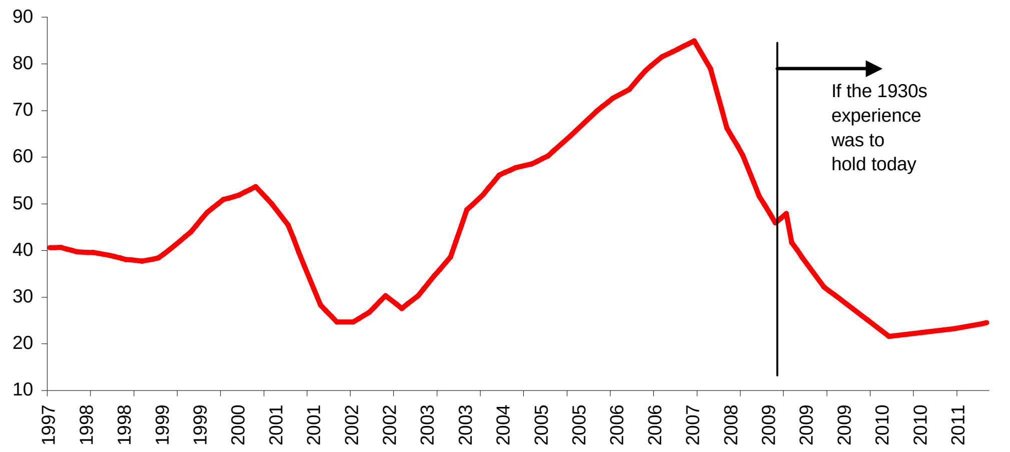
Of course, this isn't to say that the market couldn't get cheaper. It is always worth remembering Isaac Newton's words "I can predict the motion of heavenly bodies but not the madness of crowds". As the chart shows bargain basement valuations are still below the levels we see today. In general, revulsion is associated with around 10x on this measure, which given ten-year average earnings of $52 per share would give a S&P500 level of around 500!

If one wanted to be truly depressing one could point out that the absolute minimum level of valuation that we have witnessed over the last 130 years is 5x on a Graham and Dodd measure (recorded at the lows of the market in the Great Depression). This would equate to an S&P500 of 260! This isn't a forecast, and I am sure in today's world of professional investors almost constantly looking for opportunities there is virtually no chance of an equity market at such ridiculous levels (but never say never!).

To give some flavour of just how bad things would have to be to drive markets to such appallingly low valuations consider the chart below. It shows the reported earnings per share for the S&P500 since 1997. At the end of the data we have at present, I have mapped on the earnings path recorded during the 1930s.

Since the peak in 2007 reported earnings have effectively halved (driven by the write-offs in the financials). If this were the 1930s all over again, we would see a further halving of earnings from current levels! This is the kind of move that might catalyse myopic investors to create the ultimate panic.

S&P500 earnings – what if….



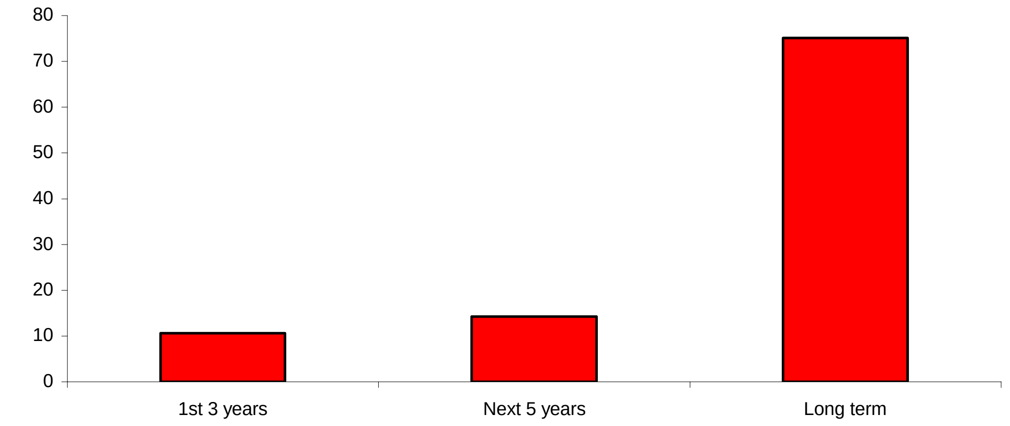
Source: SG Global Strategy Research

Such a development would, of course, be irrational in the extreme (not that that rules it out!). Equities are a long duration asset, effectively being a claim on long-term future cash flows. This point can be seen from any simple DCF[1] style calculation. I constructed a very simple DDM model for the S&P500 in aggregate.

[1] It may seem odd for me to talk about DCF valuations given my recent attack on them (see Mind Matters, 9 September). However, whilst I am a critic of their use (principally because of huge implementation issues), they do help highlight the long-term nature of equity investment.

The chart below shows the proportion of value that is contributed in the first three years, the next five years, and the long-term. The first three years contribute a mere 10% to the total value. The next five years are slightly more important representing some 15% of total value. However, the long-term provides far and away the greatest contribution to value, accounting for some 75% of the total value.

Contribution to value – S&P500 DDM

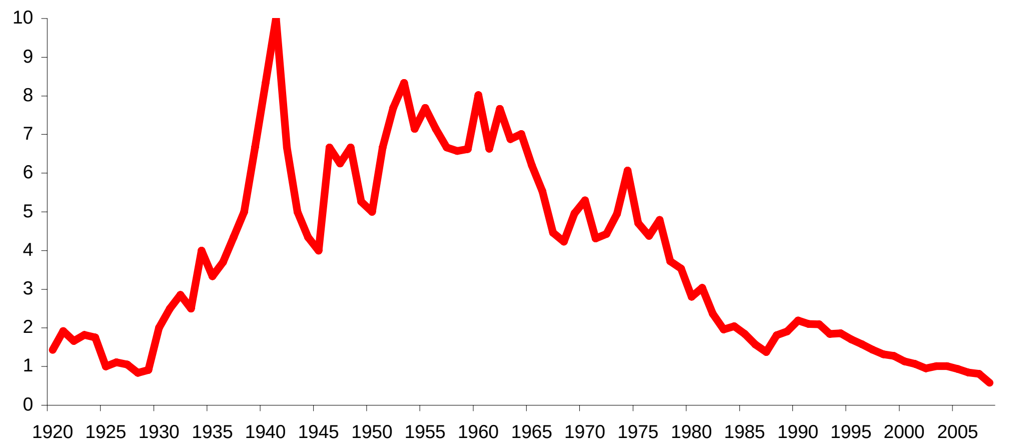


Source: SG Global Strategy Research

This simple exercise shows the relative unimportance of the next few years – even if they see earnings halve – to the long-term investor. Sadly, such a beast has become an increasingly rare commodity in the markets.

The chart below is one of my favourites; it shows the average holding period for a stock on the NYSE. It never ceases to amaze me just how short-term investors are. The **average** holding period is just seven months! Investors today make my three-year-old nephew look like he has a seriously long attention span. The market seems to have developed a chronic case of attention deficit hyperactivity disorder. The short term is the only thing that seems to matter to investors' today.

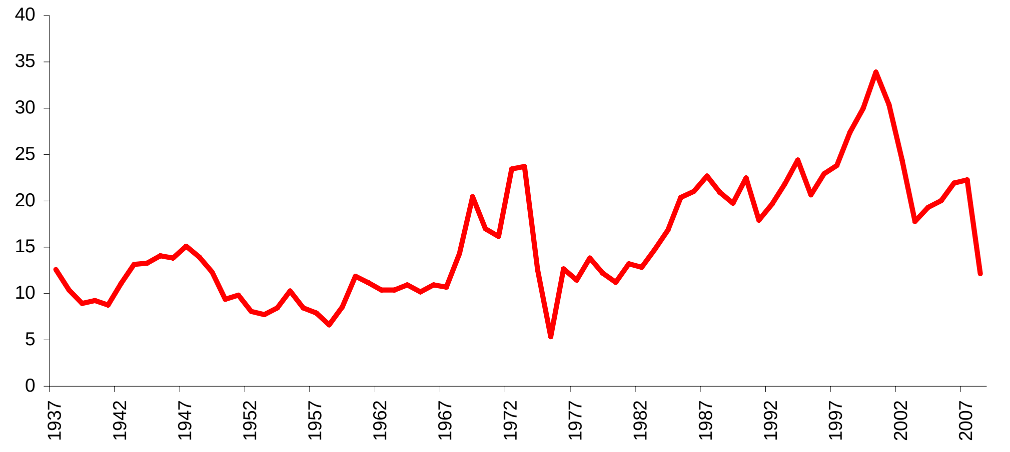
Average holding period for a stock on the NYSE



Source: SG Global Strategy Research

Of course, the US isn't the only equity market in the world. Some of the other developed markets offer even better value than the US market. For instance, the UK market when measured on a Graham and Dodd PE basis is trading on 12x (and Europe is on a similar multiple). Thus they offer even greater valuation support, and potentially even more attractive long-term returns.

UK Graham and Dodd PE



Source: SG Global Strategy Research

The view from the bottom up

Whilst discussing market-level valuations can be fun, more insight is usually derived from looking at the situation from a bottom-up perspective. The simple reason being that, as Seth Klarman writes in his commentary on the new 6th edition of Graham and Dodd's Security Analysis, value investors "Don't need the entire market to be bargain priced, just 20 or 25 unrelated securities".

As I have written many times before, the way I tend to assess bottom-up valuation is through a lens devised by Ben Graham shortly before his death. In order to qualify as a value opportunity the following criteria must be met:-

1) A trailing earnings yield greater than twice the AAA-bond yield.

2) A PE ratio of less than 40% of the peak PE ratio based on five-year moving average earnings.

3) A dividend yield at least equal to two thirds of the AAA-bond yield.

4) A price of less than two-thirds of tangible book value.

5) A price of less than two-thirds of net current assets.

6) Total debt less than two-thirds of tangible book value.

7) A current ratio greater than 2.

8) Total debt less than (or equal to) twice net current assets.

9) Compound earnings growth of at least 7% over ten years.

10) Two or fewer annual earnings declines of 5% or more in the last ten years.

Given the stringent range of these criteria it isn't surprising that we can't find any stocks that manage to pass all these tests in large-cap space. In terms of valuation, Graham's preferred measure was a price less than two-thirds of net current assets (the net-nets, we explored in Mind Matters, 30 September 2008). However, on this basis we can't find many stocks in large-cap space that offer value.

If using net-nets failed then Graham suggested that criteria 1, 3 and 6. These criteria collectively try to ensure that the stocks are cheap, returning cash to shareholders and not laden with debt (a very important factor given current market conditions).

As detailed in Mind Matters, 13 October 2008, I add one extra criteria to the list that Graham uses. I require that the Graham and Dodd PE is less than 16x – this is an attempt to weed out stocks whose value is illusory, being driven by cyclically high earnings.

The table below shows the percentage of stocks that are passing the various criteria across a selection of large markets. In the US we can now find 15 stocks which pass criteria 1,3,6 and have Graham and Dodd PEs of less than 16x. In Europe and the UK we can find nearly one in ten stocks which pass these tests. In Japan and Asia this rises to one in five! This is a value investor's version of heaven. (A full list of stocks passing the four criteria can be found at the end of this report).

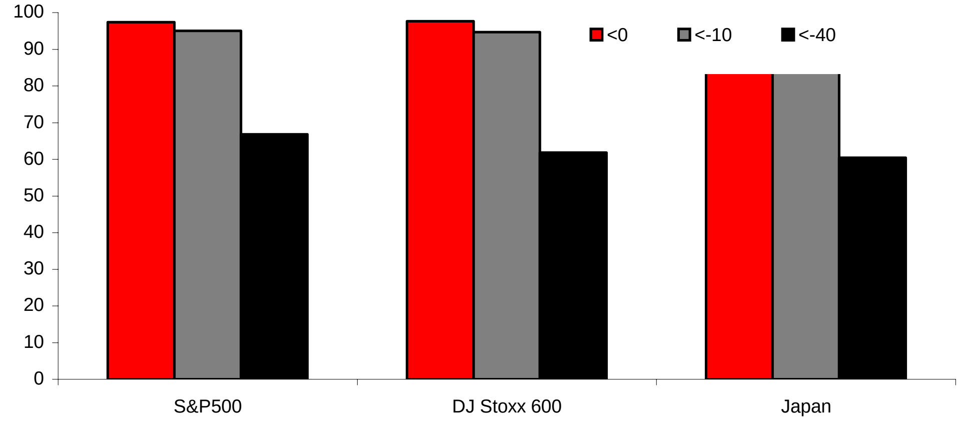
Percentage of stocks passing the Ben Graham criteria

Criteria	US	Europe	UK	Japan	Asia
EY>(2*AAA)	48	53	53	78	63
PE < 40% of Peak PE	9	10	17	5	12
DY>= 2/3 of AAA	39	67	65	83	61
Price < 2/3 TBV	3	6	11	20	19
Price < 2/3 NCA	1	0	3	0	0
Total debt < 2/3 of TBV	38	39	43	69	73
Current ratio >2	28	15	21	24	27
Total debt <= 2*NCA	20	17	25	36	27
CAGR >=7% over 10y	69	67	49	68	78
2 or fewer earnings declines of -5%	5	8	15	6	11
Passing 1,3,6	4	14	12	47	33
1,3,6 and G*D PE <16	4	9	8	20	17

Source: Global Strategy Research

I have one other observation before I leave this section. The nature of the sell-off this year has been exceptionally indiscriminate. This makes it very hard for a stock picker to add value. For instance, as the chart below shows, nearly 98% of stocks in the US and Europe have delivered negative returns so far this year. Japan has faired slightly 'better' with only 92% of stocks showing a negative return! Even if you just look at stocks that have fallen by over 40% so far this year, we find that all three markets have witnessed between 60-70% of stocks decline by such an amount. In a normal year around 30% of stocks show a negative return, and 20% or so fall by more than 10%. This shows the highly unusually nature of the events we have been observing.

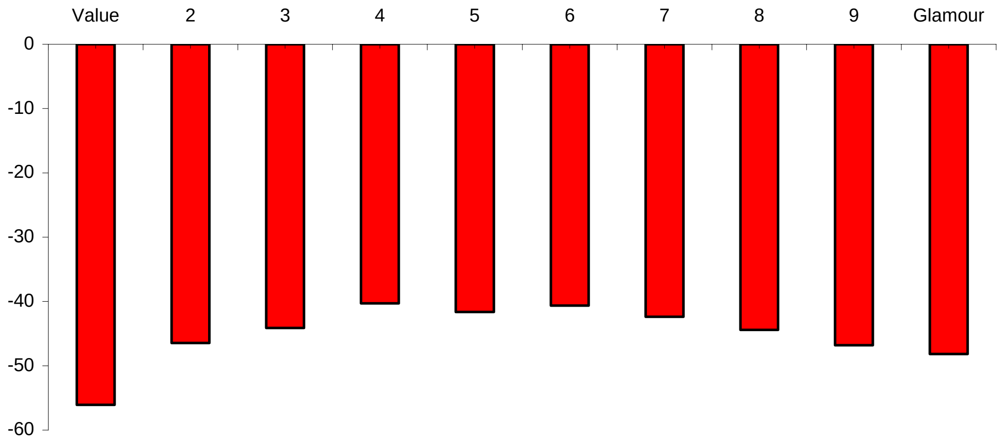
% of stocks with negative return YTD



Source: SG Global Strategy Research

Further evidence of the indiscriminate nature of selling can be found in the chart below. It shows the year-to-date performance of global deciles based around the Graham and Dodd PEs. Value stocks have suffered more than all others else – being down some 56% so far this year. In contrast, the most expensive stocks have fallen by 48%. This kind of selling is usually suggestive of the presence of a forced seller (perhaps the forced exit of some highly leveraged players). Whenever I see the presence of a forced seller I get excited. After all, this kind of seller is selling regardless of value, and hence creates an opportunity for those with a longer time horizon (back to that again).

YTD performance of global Graham and Dodd PE deciles

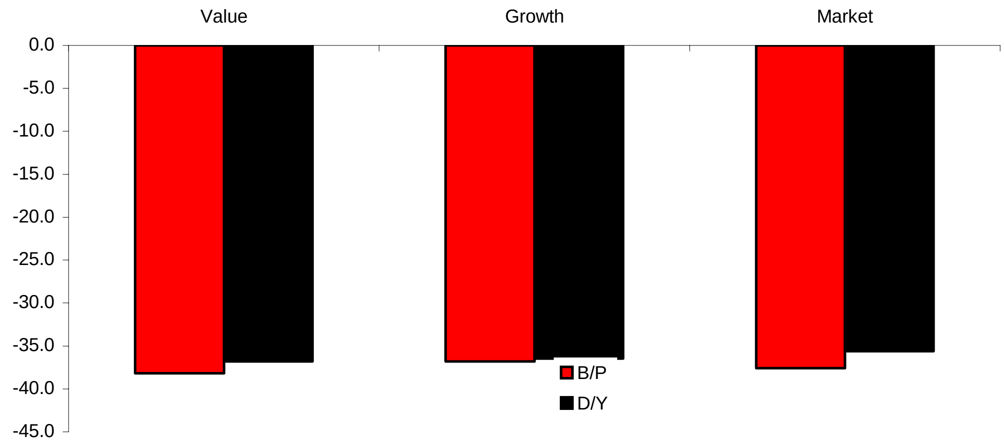


Source: SG Global Strategy Research

One of the common misperceptions I encounter is that value suffered massively more than other styles or indeed the market overall during the Great Depression. According to the evidence shown in the chart below this is a myth.

The chart shows the p.a. decline from the 1929 peak to the trough in 1932. As becomes obvious from even a cursory glance at the chart, value did no better and no worse than the glamour stocks or indeed the market overall. Whilst I am clearly not claiming that value was a great absolute return strategy during the Great Depression, we can at least kill the myth that value was worse than any other form of equity investment in the Depression. Thus the Depression was also a period of indiscriminate selling, much like that which we are witnessing today.

Absolute returns % p.a. 1929 – Bottom 1932



Source: SG Global Strategy Research

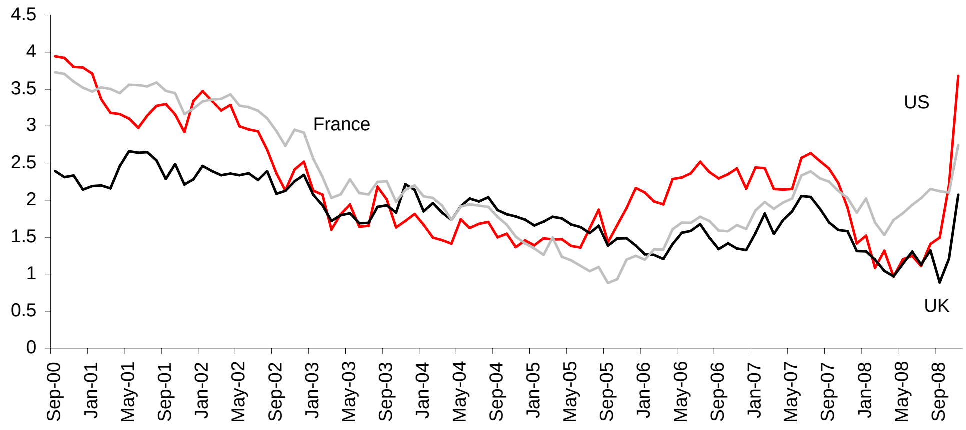
The creation of value III - cheap insurance

The final element of my strategy for surviving this environment was laid out in Mind Matters, 27 October 2008. It concerned looking for sources of cheap insurance in the face of ignorance and uncertainty. As I mentioned I am torn on the deflation/inflation debate at the moment. For a long time Albert and I have been warning of the dangers of a massive deflationary impulse unleashed by the first consumer retrenchment in a quarter of a century.

However, I am not sure that either of us had imagined that the Fed would be quite so willing to bastardise its balance sheet in such spectacular fashion, or in such a short time period. I am still not sure that the route they are using is necessarily massively inflationary, but that must certainly be the danger.

As such I've been looking for assets that would give me cheap sources of inflation protection. The most obvious of these is the index-linked bonds offered by governments. Such instruments have seen their yields rise dramatically of late – perhaps a flight to liquidity but again this presents an excellent opportunity for long-term patient investors. It is also noteworthy that the rise in real yields hasn't just been a US phenomenon (although it is in the US where the rise has been the greatest, and the yields are the highest).

Real yields (%)



Source: SG Global Strategy Research

Conclusions – the return of the coffee can portfolio

The road to revulsion is throwing up some exceptionally attractive opportunities for investors. In many ways, perhaps we are being offered the investment opportunity of a lifetime in areas such as the corporate bond markets.

In aggregate, equity markets are cheap, perhaps not at their ultimate bottom but cheap nonetheless. For those focused on long-term returns, equities are pretty attractive as an asset class. From a bottom-up perspective, the equity market is offering some excellent companies at truly bargain prices for those with the fortitude to shut their eyes, or at least switch off their screens and buy. The institutional imperative to perform on every time horizon hampers this ability in a particularly frustrating way. Investors are looking at the short term, and ignoring the long-term opportunities they are being offered.

As I was completing this note, a friend[2] sent me a great speech by Jim Fullerton (former Chairman of Capital Group) written in 1974. It concluded with a quotation from Dean Witter speaking in May 1932 which I found apposite in the extreme. “Some people say they want to wait for a clearer view of the future. But when the future is again clear, the present bargains will have vanished. In fact, does anyone think that today’s prices will prevail once full confidence has been restored?”

Perhaps it is time we reintroduced the late, great Bob Kirby’s idea of the coffee can portfolio – in which investors would have to put stocks and then not touch them – an idea he described as being passively active. As Kirby opined:

> I suspect the notion is not likely to be popular amongst investment managers, because, if widely adopted, it might radically change the structure of our industry and might substantially diminish the number of souls able to sustain opulent life-styles through the money management profession.

[2] Thank you very much indeed Christian.

> The coffee can portfolio concept harkens back to the Old West, when people put their valuable possessions in a coffee can and kept it under the mattress. That coffee can involved no transactions costs, administrative costs, or any other costs. The success of the programme depended entirely on the wisdom and foresight used to select the objects to be placed in the coffee can to begin with…
>
> What kind of results would good money managers produce without all that activity? The answer lies in another question. Are we traders, or are we really investors? Most good money managers are probably investors deep down inside. But quotrons and news services, and computers that churn out daily investment results make them act like traders. They start with sound research that identifies attractive companies in promising industries on a longer-term horizon. Then, they trade those stocks two or three times a year based on month-to-month news developments and rumours of all shapes and sizes.

This looks like a great time to start to fill up your coffee can.

As if all this wasn't enough, Mr Market is offering you the opportunity to protect yourself from the ravages of inflation in an exceptionally cheap way. With all of these opportunities available I have never been more bullish! Will I be early? Almost certainly yes, but if I can find assets with attractive returns and I have a long time horizon I would be mad to turn them down. As Jeremy Grantham said in his Q3 letter "If stocks are attractive and you don't buy and they run away, you don't just look like an idiot, you are an idiot".

S&P500 stocks passing 1, 3, 6 and G&D PE <16x

Company Name	EY>(2*AAA)	DY>=2/3 of AAA	Graham and Dodd PE	Market cap. (US$)
Allegheny Technologies Inc.	47.6	3.7	8.7	8,777.1
Carnival Corp.	19.6	10.7	7.4	35,013.6
Chevron Corp.	13.6	3.9	15.4	195,100.2
ConocoPhillips	17.3	4.5	9.4	142,502.2
Cummins Inc.	20.8	3.4	14.1	12,877.1
Dow Chemical Co.	18.0	9.8	7.7	37,069.3
Gap Inc.	11.0	3.5	10.3	15,619.5
Illinois Tool Works Inc.	11.3	4.1	14.6	28,381.4
Ingersoll-Rand Co. Ltd.	20.6	6.0	6.0	15,350.7
KLA-Tencor Corp.	15.9	3.8	10.6	9,216.1
Marathon Oil Corp.	29.0	4.9	7.7	43,210.6
Molex Inc.	10.6	3.5	12.2	5,024.5
Nucor Corp.	19.4	9.6	12.1	17,055.0
Tesoro Corp.	59.7	5.9	3.9	6,537.0
Valero Energy Corp.	54.9	4.1	4.6	37,582.3

Source: SG Global Strategy Research

DJ Stoxx 600 stocks passing 1,3,6 and G&D PE <16 x

Company Name	EY>(2*AAA)	DY>=2/3 of AAA	Graham and Dodd PE	Market cap. (US$)
Acerinox S.A.	12.4	3.6	11.6	6,367.8
Anglo American PLC	19.1	5.4	8.3	82,067.0
Antofagasta PLC	21.9	6.9	12.7	14,083.7
Bekaert S.A. N.V.	16.8	6.1	11.0	2,663.4
BHP Billiton PLC	18.2	4.9	14.5	212,730.6
BP PLC	11.7	4.9	13.4	230,903.4
Bulgari S.P.A.	10.5	6.7	15.0	4,179.8
Charter International PLC	36.4	5.3	7.3	2,619.6
Deutsche Lufthansa AG	27.8	13.8	9.9	12,160.4
ENI S.p.A.	16.4	7.8	9.9	133,727.6
Eramet S.A.	22.4	5.9	14.9	13,062.3
Georg Fischer AG	30.1	13.0	6.7	2,472.2
Iberia Lineas Aereas de Espana S.A.	20.1	9.9	7.8	4,138.1
Kesko Oyj	14.7	8.9	13.1	5,383.6
Konecranes Oyj	21.5	7.9	15.0	2,014.0
Koninklijke DSM N.V.	13.8	7.0	5.7	7,877.0
Koninklijke Philips Electronics N.V.	33.9	5.6	6.6	45,891.3
MAN AG	28.8	11.0	10.2	24,505.2
Modern Times Group MTG AB	16.1	4.0	15.2	4,669.9
Nokia Corp.	17.8	5.1	12.8	148,896.8
Nokian Renkaat Oyj	16.6	6.0	15.9	4,342.9
Norddeutsche Affinerie AG	24.9	6.0	12.9	1,631.7
Norsk Hydro ASA	33.6	7.0	7.1	17,263.2
OMV AG	30.2	7.1	7.6	24,168.8
Orkla ASA	22.7	6.2	7.7	19,834.1
Outokumpu Oyj	54.2	18.5	4.6	5,576.6
Persimmon PLC	61.0	22.7	2.9	4,809.1
Rautaruukki Oyj	33.4	20.2	7.1	6,004.3
Repsol YPF S.A.	19.2	7.4	7.8	43,451.9
Royal Dutch Shell Class A	20.4	5.8	8.9	260,654.8
Salzgitter AG	39.7	7.5	6.0	8,409.9
Skanska AB	17.2	14.5	8.4	7,898.5
SKF AB	16.6	8.3	13.7	7,712.5
StatoilHydro ASA	13.5	8.3	11.5	99,064.4
Swatch Group AG	15.3	3.5	11.7	16,151.1
Tomkins PLC	21.9	14.7	5.1	3,151.8
Total S.A.	15.6	5.5	11.6	186,178.8
Umicore S.A.	50.7	6.3	8.3	5,959.9
Vallourec S.A.	26.5	9.8	13.3	14,205.2
Wacker Chemie AG	13.2	4.7	13.8	14,219.5
Wartsila Oyj	15.5	24.0	9.3	7,297.9

Source: SG Global Strategy Research

FT All share stocks passing 1,3,6 and G&D <16x

Company Name	EY>(2*AAA)	DY>=2/3 of AAA	Graham and Dodd PE	Market cap. (US$)
AGA Rangemaster Group PLC	28.5	16.9	3.6	819.0
Anglo American PLC	19.1	5.4	8.3	82,067.0
Anglo Pacific Group PLC	27.9	7.1	13.6	375.1
Antofagasta PLC	21.9	6.9	12.7	14,083.7
BHP Billiton PLC	18.2	4.9	14.5	212,730.6
Bovis Homes Group PLC	24.0	11.6	5.0	1,479.2
BP PLC	11.7	4.9	13.4	230,903.4
Braemar Shipping Services PLC	19.6	9.2	11.5	184.0
Castings PLC	17.3	6.3	9.0	244.6
Charter International PLC	36.4	5.3	7.3	2,619.6
Computacenter PLC	23.7	10.3	3.3	597.9
Diploma PLC	10.5	6.7	12.1	310.8
Domino Printing Sciences PLC	12.5	6.1	12.9	758.7
Greggs PLC	11.2	4.6	14.0	990.7
Headlam Group PLC	19.5	12.2	10.7	718.0
Hornby PLC	15.2	8.0	11.0	141.1
JD Sports Fashion PLC	20.9	3.6	12.7	340.6
Kier Group PLC	17.1	4.8	9.1	699.9
Millennium & Copthorne Hotels PLC	29.0	7.2	7.0	2,400.7
Morgan Sindall PLC	20.1	8.2	10.1	889.2
Persimmon PLC	61.0	22.7	2.9	4,809.1
PZ Cussons PLC	10.9	4.6	14.3	1,634.2
Royal Dutch Shell PLC (CL B)	16.8	4.8	11.5	257,534.8
St. Ives PLC	22.3	24.2	3.2	341.4
T. Clarke PLC	12.7	10.6	7.0	137.9
Ted Baker PLC	12.3	5.6	13.1	400.5
Tomkins PLC	21.9	14.7	5.1	3,151.8

Source: SG Global Strategy Research

MSCI Japan stocks passing 1,3,6, and G&D <16x

Company Name	EY>(2*AAA)	DY>=2/3 of AAA	Graham and Dodd PE	Market cap. (US$)
Advantest Corp.	8.4	4.6	10.3	4,629.3
Aisin Seiki Co. Ltd.	25.5	4.7	9.2	10,490.6
Alps Electric Co. Ltd.	6.1	5.0	8.3	1,761.7
Asahi Glass Co. Ltd.	13.0	3.5	14.3	15,726.9
Bridgestone Corp.	10.4	1.6	15.2	13,869.0
Brother Industries Ltd.	17.2	3.8	10.8	2,827.9
Canon Inc.	14.5	4.2	13.1	58,623.6
Citizen Holdings Co. Ltd.	8.3	3.5	15.5	2,931.1
Dai Nippon Printing Co. Ltd.	7.1	3.8	16.1	10,510.3
Daihatsu Motor Co. Ltd.	10.6	2.2	16.4	5,111.3
Daiichi Sankyo Co. Ltd.	7.8	4.0	16.3	21,216.0
Dainippon Sumitomo Pharma Co. Ltd.	8.2	2.3	16.4	3,627.8
Denki Kagaku Kogyo K.K.	6.7	4.9	12.7	1,544.1
Denso Corp.	21.1	3.8	9.8	26,223.0
Fuji Media Holdings Inc.	5.1	2.7	16.0	3,392.3
FUJIFILM Holdings Corp.	9.6	1.6	14.7	17,842.4
Hitachi Chemical Co. Ltd.	17.7	3.7	9.7	3,894.2
Hitachi High-Technologies Corp.	13.4	2.1	14.8	2,272.7
Hoya Corp.	15.0	5.2	12.5	10,149.2

Source: SG Global Strategy Research

MSCI Japan stocks passing 1, 3, 6, and G&D <16x (cont'd)

Company Name	EY>(2*AAA)	DY>=2/3 of AAA	Graham and Dodd PE	Market cap. (US$)
Ibiden Co. Ltd.	22.9	4.1	11.4	5,789.6
Ito En Ltd.	5.7	2.7	15.5	1,539.6
Itochu Techno-Solutions Corp.	9.9	3.4	13.6	1,983.5
JSR Corp.	15.8	3.4	13.5	5,653.7
JTEKT Corp.	19.4	3.4	14.6	5,232.2
Kaneka Corp.	13.3	3.9	9.6	2,124.5
Kansai Paint Co. Ltd.	11.5	2.7	15.4	1,725.3
Kyocera Corp.	12.5	2.7	11.1	15,886.5
Mabuchi Motor Co. Ltd.	7.2	3.1	11.4	2,304.4
Makita Corp.	19.6	5.9	14.0	4,509.1
Mitsubishi Gas Chemical Co. Inc.	25.9	4.8	9.7	3,282.7
Mitsubishi Rayon Co. Ltd.	10.9	5.0	11.5	1,829.5
Mitsumi Electric Co. Ltd.	27.8	4.9	13.8	2,760.7
Murata Manufacturing Co. Ltd.	11.4	3.3	12.4	10,883.0
NGK Spark Plug Co. Ltd.	12.1	3.2	12.6	2,829.9
NHK Spring Co. Ltd.	23.5	3.9	12.1	1,714.2
Nippon Electric Glass Co. Ltd.	21.4	1.8	13.1	7,682.9
Nippon Steel Corp.	21.9	4.3	13.1	31,840.7
Nissan Chemical Industries Ltd.	12.4	2.9	16.2	1,891.3
Nisshin Steel Co. Ltd.	31.9	7.2	11.3	3,131.5
Nitto Denko Corp.	17.7	5.1	9.6	7,026.6
Nok Corp.	21.7	2.9	7.8	3,537.6
OKUMA Corp.	32.3	5.1	13.9	1,780.4
OMRON Corp.	14.5	3.1	14.7	4,542.4
Onward Holdings Co. Ltd.	11.3	4.4	13.4	1,535.5
Ricoh Co. Ltd.	16.8	3.8	8.5	11,832.8
Rohm Co. Ltd.	6.9	3.2	9.1	6,774.3
Sekisui Chemical Co. Ltd.	8.7	2.8	-185.0	3,174.6
Sharp Corp.	15.7	4.7	11.9	18,680.2
Shinko Electric Industries Co. Ltd.	18.8	6.1	7.1	1,522.8
Showa Shell Sekiyu K.K.	16.6	5.1	12.6	4,175.2
Sony Corp.	20.2	1.4	12.0	39,915.8
Stanley Electric Co. Ltd.	14.6	2.7	15.3	4,363.0
Sumitomo Electric Industries Ltd.	16.3	2.9	14.8	9,974.8
Sumitomo Metal Mining Co. Ltd.	39.6	5.0	9.0	10,766.2
Suzuken Co. Ltd.	11.5	2.5	13.3	3,776.1
Takeda Pharmaceutical Co. Ltd.	9.4	3.8	16.2	42,142.9
TDK Corp.	20.1	4.7	9.3	7,610.7
THK Co. Ltd.	15.6	4.0	10.0	2,212.6
Tokai Rika Co. Ltd.	29.0	5.9	7.0	2,355.8
Tokyo Electron Ltd.	24.3	5.1	12.9	10,865.0
Tokyo Steel Manufacturing Co. Ltd.	8.6	2.6	12.2	2,018.3
Toppan Printing Co. Ltd.	9.0	3.4	15.8	7,608.6
Toyoda Gosei Co. Ltd.	20.7	4.0	11.3	4,858.7
Toyota Boshoku Corp.	32.0	5.1	9.4	5,588.2
Toyota Industries Corp.	14.0	3.3	16.0	11,052.3
Ushio Inc.	10.5	2.2	15.4	2,563.5
Yamaha Corp.	24.9	6.5	12.9	3,939.8
Yamaha Motor Co. Ltd.	27.8	4.6	6.7	6,924.2
Yamato Kogyo Co. Ltd.	26.1	2.5	9.9	2,898.3

Source: SG Global Strategy Research

MSCI Asia stocks passing 1, 3, 6 and G&D PE <16x

Company Name	EY>(2*AAA)	DY>= 2/3 of AAA	Graham and Dodd PE	Market cap. (US$)
Acer Inc.	13.6	9.1	13.4	4,710.8
Advanced Semiconductor Engineering Inc.	22.7	17.1	10.6	5,248.9
Ambuja Cements Ltd.	22.3	4.0	14.2	4,810.5
Aneka Tambang	59.8	23.9	8.5	4,524.6
Asia Cement Corp.	15.5	10.7	15.8	3,997.6
ASM Pacific Technology Ltd.	16.3	14.0	11.2	2,872.5
ASUSTeK Computer Inc.	21.2	7.7	7.3	11,199.3
Bumi Resources	50.7	10.0	12.2	12,152.6
Cheung Kong (Holdings) Ltd.	18.3	3.8	8.2	42,824.3
China Merchants Holdings (International) Co. Ltd.	12.5	5.4	16.3	14,962.8
China Motor Corp.	15.6	4.7	2.7	1,043.6
China Shipping Development Co. Ltd.	26.5	9.7	12.0	8,785.1
China Travel International Investment Hong Kong Ltd.	12.1	6.5	11.3	3,753.5
Chinese Estates (Holdings) Ltd.	72.1	7.2	4.7	4,176.7
CITIC Pacific Ltd.	82.9	23.6	3.0	12,352.5
CNPC (Hong Kong) Ltd.	12.2	5.2	11.4	3,099.9
Compal Electronics Inc.	22.5	15.2	6.6	4,179.4
Cosco Pacific Ltd.	31.7	15.6	6.2	5,987.0
Daelim Industrial Co. Ltd.	49.8	8.4	4.6	6,603.0
Denway Motors Ltd.	18.9	7.0	9.0	4,829.9
Evergreen Marine Corp. (Taiwan) Ltd.	21.9	10.6	10.2	2,769.5
Feng Hsin Iron & Steel Co. Ltd.	16.0	10.8	11.5	961.5
Formosa Chemicals & Fibre Corp.	17.4	14.1	12.1	14,141.8
Formosa Plastics Corp.	16.4	13.1	13.9	16,071.8
Formosa Taffeta Co. Ltd.	25.0	18.3	11.7	1,695.9
GAIL (India) Ltd.	12.0	3.6	13.2	8,949.5
Globe Telecom Inc.	13.6	10.2	14.8	5,038.3
GS Engineering & Construction Corp.	17.5	3.7	11.8	8,255.2
Hang Lung Group Ltd.	28.9	3.6	10.4	5,927.9
Hang Lung Properties Ltd.	24.3	5.0	12.0	13,289.2
Hang Seng Bank Ltd.	11.0	7.3	15.4	39,442.5
Henderson Land Development Co. Ltd.	32.6	4.8	5.9	13,381.1
Hon Hai Precision Industry Co. Ltd.	17.3	5.6	14.2	39,189.5
Hopewell Holdings Ltd.	33.4	13.1	11.4	3,169.7
Hysan Development Co. Ltd.	34.4	5.5	6.9	2,959.8
Hyundai Development Co.	20.2	3.9	12.2	7,311.5
Inventec Corp.	27.7	16.3	5.1	1,407.6
Jiangxi Copper Co. Ltd.	37.0	7.9	8.3	7,418.5
Keppel Corp. Ltd.	15.9	7.0	16.1	14,329.7
Kerry Properties Ltd.	41.9	8.1	6.9	11,441.2
Kingboard Chemical Holdings Ltd.	33.9	10.2	5.0	4,986.2
Korea Zinc Co. Ltd.	47.3	4.0	7.0	2,444.9
Lite-On Technology Corp.	16.6	14.3	6.5	3,758.0
MiTAC International Corp.	39.3	14.1	5.0	1,408.2
Nan Ya Plastics Corp.	19.4	16.8	11.1	20,219.6
Neptune Orient Lines Ltd.	55.8	14.6	3.4	4,058.2
NWS Holdings Ltd.	25.9	13.0	12.8	5,369.8
Oil & Natural Gas Corp. Ltd.	14.3	4.9	13.2	52,286.1

Source: SG Global Strategy Research

MSCI Asia stocks passing 1, 3, 6 and G&D PE <16x (cont'd)

Company Name	EY>(2*AAA)	DY>= 2/3 of AAA	Graham and Dodd PE	Market cap. (US$)
Orient Overseas (International) Ltd.	57.2	66.9	3.1	4,629.8
Pakistan State Oil Co. Ltd.	30.6	8.8	8.7	1,049.9
POSCO	16.7	3.6	10.0	46,041.8
S-Oil Corp.	12.4	23.6	12.1	9,412.3
SembCorp Industries Ltd.	14.6	7.4	13.4	7,194.7
Shanghai Industrial Holdings Ltd.	15.0	6.1	9.8	4,670.1
Shun Tak Holdings Ltd.	28.7	8.8	7.5	3,660.1
Singapore Airlines Ltd.	16.7	9.9	9.0	13,410.8
Singapore Telecommunications Ltd.	10.5	5.3	13.6	42,760.0
Sino Land Co. Ltd.	29.9	7.4	7.7	9,697.5
SINOPEC Shanghai Petrochemical Co. Ltd.	14.6	5.7	8.9	4,440.5
SK Telecom Co. Ltd.	10.7	4.4	13.1	21,430.3
Steel Authority of India Ltd.	31.4	6.3	11.5	19,008.6
Sun Hung Kai Properties Ltd.	21.4	4.9	9.6	34,787.8
Swire Pacific Ltd.	40.1	7.5	6.7	20,899.6
Synnex Technology International Corp.	11.1	6.9	14.4	2,707.9
Taiwan Semiconductor Manufacturing Co. Ltd.	11.3	8.2	15.0	48,935.9
TECO Electric & Machinery Co. Ltd.	17.7	12.1	11.6	940.8
Television Broadcasts Ltd.	11.9	7.4	13.6	2,631.1
Tung Ho Steel Enterprise Corp.	22.0	14.5	12.8	1,559.7
U-Ming Marine Transport Corp.	29.1	23.5	10.1	2,344.5
United Microelectronics Corp.	14.7	10.6	5.3	7,773.9
UOL Group Ltd.	52.1	8.2	6.5	2,502.2
Venture Corp. Ltd.	25.8	13.6	6.1	2,441.2
Wharf (Holdings) Ltd.	38.5	5.6	6.1	12,822.1
Yanzhou Coal Mining Co. Ltd.	19.4	5.0	9.1	9,749.7
Yue Yuen Industrial (Holdings) Ltd.	12.7	6.3	9.8	4,980.0
Yulon Motor Co. Ltd.	16.8	4.7	4.6	1,405.7
Zhejiang Expressway Co. Ltd.	16.6	9.2	13.3	6,949.8

Source: SG Global Strategy Research

IMPORTANT DISCLOSURES

American Water Works	SG acted as co-manager in American Water Works' IPO
BHP Billiton plc	SG is acting as advisor to Rio Tinto in its defense against the proposed takeover bid by BHP Billiton
ENI	SG makes a market in Eni warrants
Vallourec	SG is acting as financial advisor to Vallourec for the acquisition of three tubular businesses from Grant Predico
Vallourec	SG acted as financial advisor to Vallourec in the disposal of Vallourec Precision Soudage and Vallourec Composants Automobiles Vitry to Arcelor Mittal

US THIRD PARTY FOREIGN AFFILIATE RESEARCH DISCLOSURES:

SG and its affiliates beneficially own 1% or more of any class of common equity of Bulgari, Deutsche Lufthansa, France Télécom, MAN AG, Philips, Repsol-YPF, Vallourec.
SG or its affiliates act as market maker or liquidity provider in the equities securities of Acerinox, ENI, France Télécom, Munich RE, Nokia, Philips.
SG or its affiliates expect to receive or intend to seek compensation for investment banking services in the next 3 months from American Water Works, BHP Billiton plc, Bulgari, Deutsche Lufthansa, ENI, Eramet, France Télécom, Iberia, Munich RE, Repsol-YPF, Royal Dutch Shell, StatoilHydro, Vallourec.
SG or its affiliates have received compensation for investment banking services in the past 12 months of American Water Works, France Télécom, Vallourec.
SG or its affiliates managed or co-managed in the past 12 months a public offering of securities of American Water Works, France Télécom.