In this section of PWM we test the performance and volatility of two investment strategies using model portfolios. Each month we look at a different European and global basket of stocks

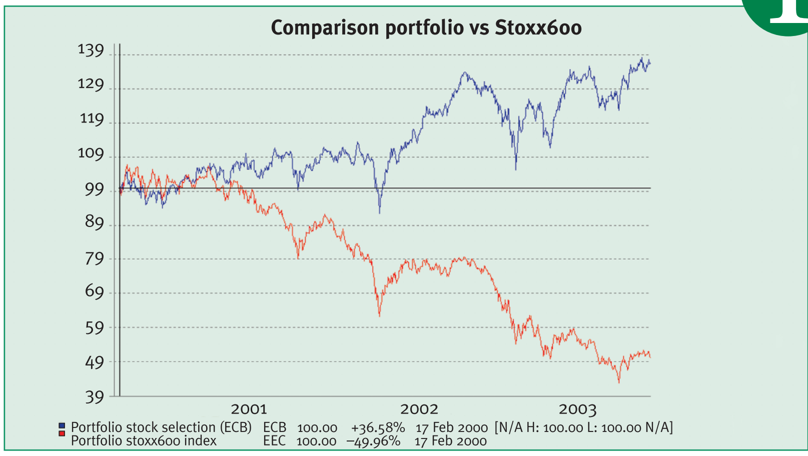
EUROPEAN PORTFOLIO

Which Stoxx600 sectors are best suited for a medium to long-term investment on the basis of a quantitative risk reward analysis? One way to obtain an answer to this question would be to calculate the information ratio (IR) over one-year and three-year periods and then compare the respective allocation weights of the single sectors. The IR is designed to test relative strength or weakness of the sector index versus the main benchmark.

The result is intriguing – only the banking sector shows a simultaneously high and increasing IR. All other sectors that show an increasing IR over the last 12 months also show a below average IR over the last three years. The biggest improvements are seen in telecoms, consumer services, transportation, technology and media.

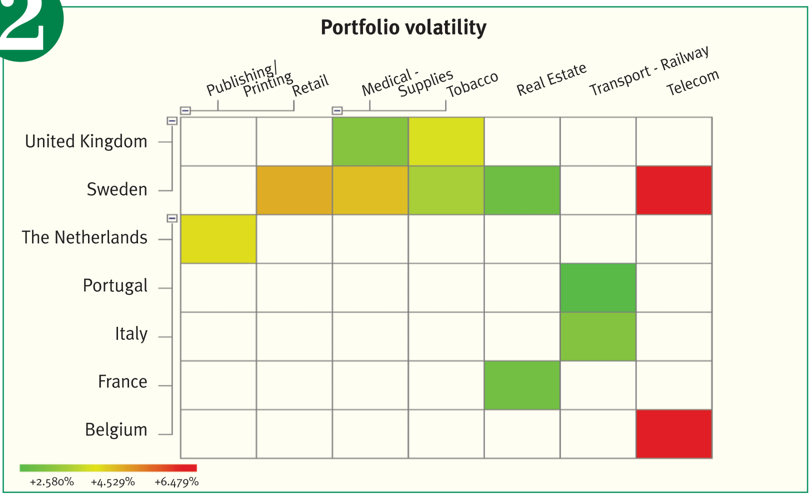
Investing on the basis of long term strength has not been an easy undertaking in Europe over the last three years. Much better results could be achieved by simple stock-picking. The IR over three years can also be used for stock selection for a portfolio of 12 stocks that represent those three sectors with the highest weighting over three years and those with the highest IR over 12 months. The chart comparing this selected portfolio to the Stoxx600 clearly shows good stock-picking.

1



Above: Comparison of portfolio versus Stoxx600
Below: The heat map shows on topside the sectors and countries where volatility was found within the portfolio. Green indicates lowest volatility at +2.536%

2



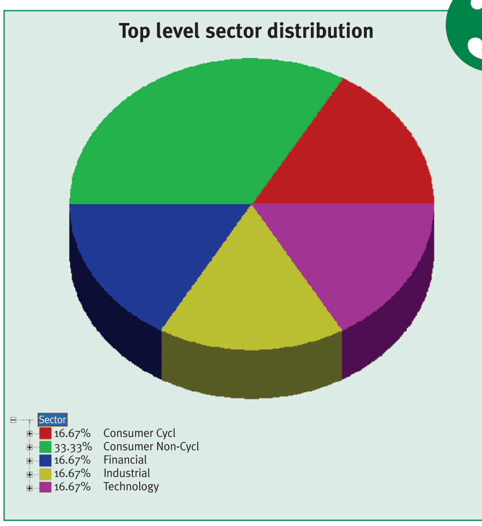
TOP 12 STOCKS

NAME	Information Ratio – 3 yrs	Mean return	Volatility
AUTOSTRADE SPA	1.7035	+0.645%	+3.165%
BRISA AUTO-ESTRADAS -PRIV	1.6826	−0.357%	+2.580%
GETINGE AB -B	2.1367	+0.132%	+4.587%
HENNES & MAURITZ AB -B	0.8822	−0.124%	+4.754%
IMPERIAL TOBACCO GROUP	1.6997	−0.018%	+4.089%
KLEPIERRE	1.2622	+0.087%	+2.963%
LE LUNDBERGFORETAGEN AB	1.7465	−0.041%	+2.864%
MOBISTAR SA	0.3705	+1.487%	+6.405%
REED ELSEVIER NV	1.1358	−0.652%	+4.342%
SMITH & NEPHEW	1.5610	+0.154%	+3.226%
SWEDISH MATCH AB	1.8875	−0.420%	+3.606%
TELE2 AB -B	0.4148	+0.915%	+6.479%

Chart 3 (at right) shows the top-level sector distribution of the European portfolio

The table (at left) shows the portfolio of 12 stocks representing those three sectors with highest three-year weighting and those with highest 12 month IR

3



GLOBAL PORTFOLIO

There are many different asset classes and subclasses, which could be used to show an optimised high return and low risk portfolio profile. Only 10 major asset classes are used for the sake of simplicity. The "Altin Fund" represents hedge funds while the CRB Index replicates the price of raw materials. The optimisation was made on the basis of quantitative data for one year – a good time horizon for investments with a time frame of the next three to 12 months.

The weight of each asset class was obtained through an allocation process that used two elements that optimise risk and return. The higher the weight the better the return to risk profile.

Four different asset classes fight for first position, all of which make part of the bond asset classes. Interestingly, bonds and raw material prices have shown an inverse correlation in the past but presently both show similar risk reward characteristics. The bottom groups are represented by those asset classes which have shown the worst performance over the last 12 months. The equity markets are practically excluded from the asset allocation portfolio with a weight of 0.962 per cent, while real estate also shows a very low weighting of 2.799 per cent because of the consistently negative performance over the last two years.

The broadly based asset allocation portfolio (+22.33 per cent since February 2000) has done much better than the classical balanced equity and bond portfolio (–11.58 per cent).

The volatility of the broad based and optimised asset portfolio is only about a third compared with the classic balanced portfolio for a return and standard deviation profile over different time frames. Bond products are therefore still the best place to be although hedge funds, convertible bonds and raw material are good alternatives.

For further information on Brainpower's professional portfolio analysis software, please visit www.brainpowerweb.com or contact Alan Parmenter on +44 (0) 20 7392 7108

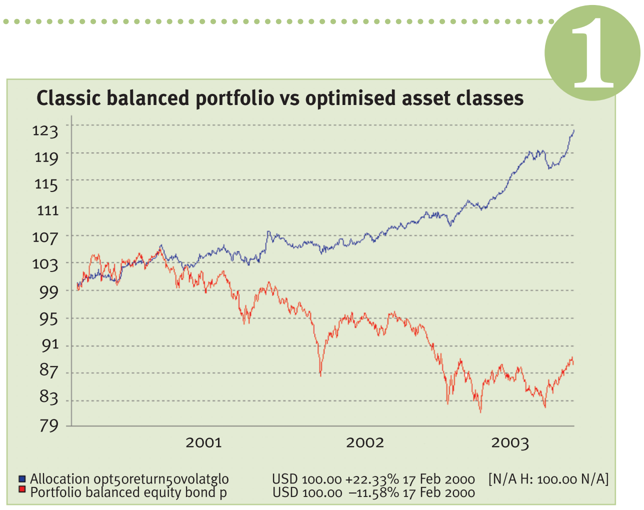


Chart 1 above shows comparison between classic balanced portfolio versus optimised asset classes

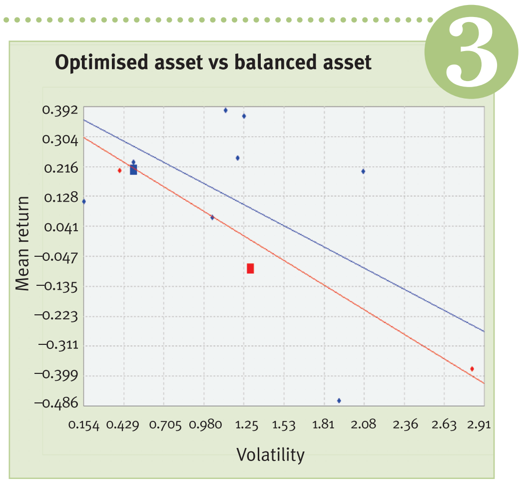
2 PORTFOLIO COMPARISON
EQUITY BOND BAL. VS OPTIMISED ASSET ALLOC'N

	Allocation opt50 return50volatglo [10]	Portfolio balanced equity bond p [2]
Mean Return	+0.205%	–0.084%
Volatility	+0.498%	+1.299%
Total Return over 12 months	+11.736%	–5.500%
Total Return over 14 months	+13.770%	–11.825%
Total Return over 36 months	+21.884%	–12.068%
Standard Deviation over 12 months	+0.209%	+0.651%
Standard Deviation over 24 months	+0.204%	+0.567%
Standard Deviation over 36 months	+0.218%	+0.570%

LIST OF INDICES

NAME	Information Ratio – 3 yrs	Mean return	Volatility
JP MORGAN GBI GLOBAL LOC	13.530	+0.204%	+0.403%
JP MORGAN HIGHER YLD IDX LCL	13.472	+0.228%	+0.497%
JP MORGAN SH TERM GBL IDX LCL	13.399	+0.111%	+0.159%
JP MORGAN EMBI GLOBAL DIVERS	13.007	+0.380%	+1.131%
CRB/BRIDGE FUTURES INDEX	12.470	+0.363%	+1.257%
ALTIN AG	11.469	+0.240%	+1.212%
GS GLOBAL CONVERTIBLE	10.358	+0.065%	+1.040%
GOLD PERPETUAL	8.533	+0.201%	+2.078%
MSCI W-REAL ESTATE LCL	2.799	–0.472%	+1.908%
MSCI WRLD LCL	0.962	–0.378%	+2.822%

The scatter diagram (at right) compares optimised asset portfolios versus balanced asset portfolios



The table (at left) shows the global asset allocation list of indices

Data, charts and comment supplied by Brainpower