

## EUROPEAN LARGE CAP EQUITY SELECT

# Why even risk averse investors should consider equity for their asset allocation

## SUMMARY

- In this research paper we address the issue of whether risk averse investors should consider including equities in their asset allocation. We have used US assets as proxy for our study as they provide the longest time series of historical data.
- We first review the additional return and risk linked to equity investment. We also show how long term investment greatly reduces the risk associated to equity.
- We then demonstrate how including equity in an asset allocation improves its return characteristics while maintaining over the long term the risk under control.
- Last we conclude by showing how European equities currently offer attractive characteristics that call for them to be included in an asset allocation strategy.

## PURPOSE AND ASSUMPTIONS USED IN THIS RESEARCH PAPER

In this research paper we aim to demonstrate how, under certain assumptions, investors should consider investing into equities, even if they are risk averse.

In order to study the outcome of including equity in an asset allocation, we have used US assets as they provide the longest time series of historical data. We have constructed three proxies to simulate the total return of US equity, bonds and money market investments:

- Our proxy for US equity total return index is using the S&P500 Price Return Composite Index which we have adjusted to include the dividend yield of its constituents
- Our proxy for US bonds total return index is using the 10 years T-note for which we combine a price ex-coupons component and a yield component which we compound on a daily basis
- Our proxy for US money market total return index is using the 3 months T-bill yield which we compound daily

We have used raw data from Factset and Bloomberg in this study.

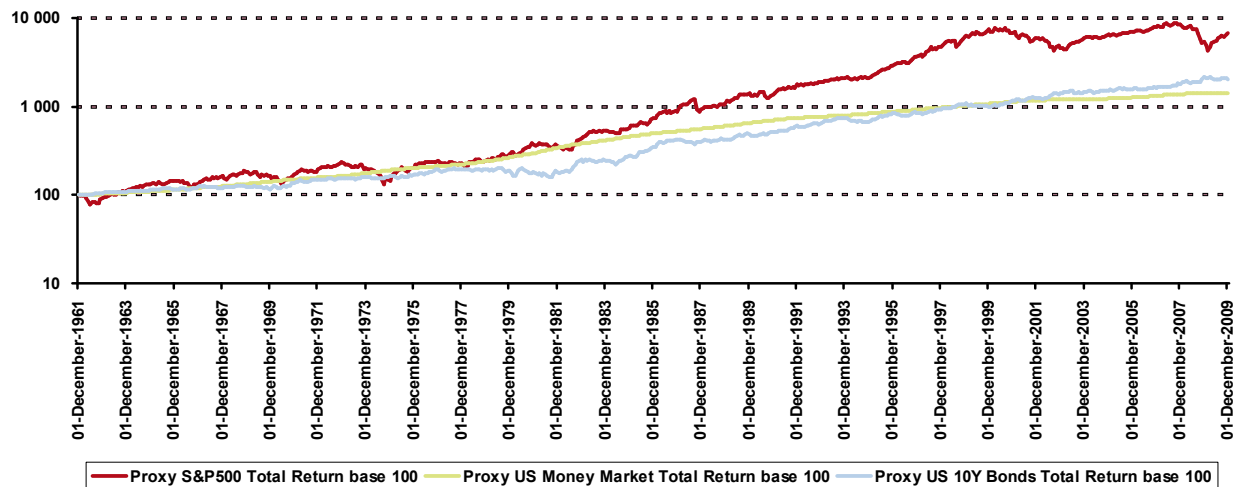


## RISK RETURN CHARACTERISTICS OF EQUITY INVESTMENT

### Equity delivers a higher return...

The graph below shows the cumulative return of US equity, bonds and money market over the past 48 years. On average the equity proxy delivered a total return of +9.2% p.a. versus a total return of +6.5% p.a. for the bonds proxy and a total return of +5.7% p.a. for the money market proxy. **It is therefore obvious that over a long investment period, equity delivers a performance that is significantly higher than bonds and money market.**

Compared cumulative returns of US equity, bonds and money market (base 100, logarithmic scale)



Source: Factset, Bloomberg and BNP Paribas Asset Management as of August 2010

### ...at the cost of a higher volatility...

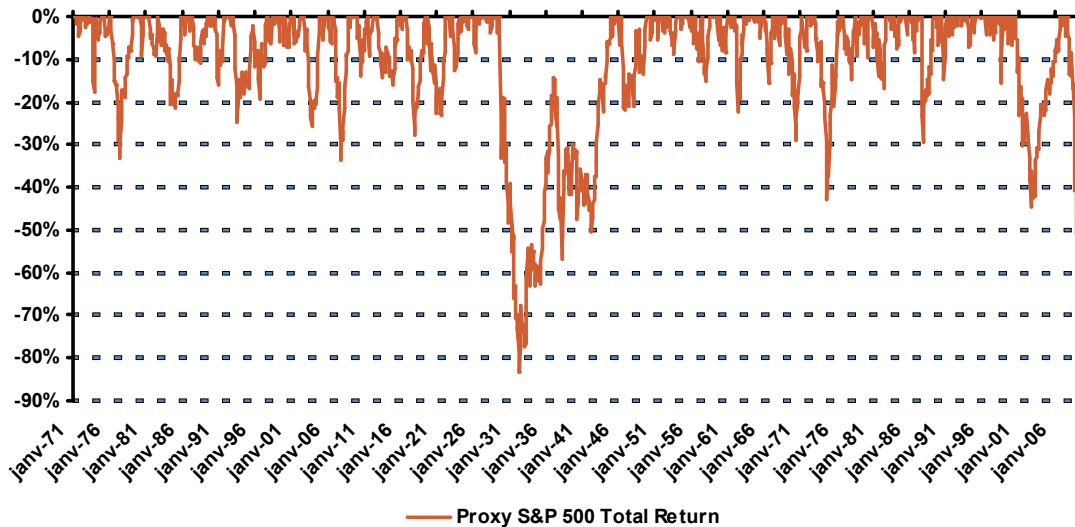
Unfortunately the higher return of equity comes at the price of a higher volatility. This feature which has been slightly overshadowed by the bull market of the 80's and 90's, has come back to the fore over the past 10 years with the two market crashes of 2001 and 2008. The graph below shows the drawdowns of US equity between January 1871 and December 2009. The drawdown is defined as the position of the index versus its previous high. Hence this graph is showing the frequency of the market pullbacks, their intensity, as well as the time it takes for the market to recover.

We note first that there is a high frequency of drawdowns with many of them exhibiting a drop of more than -10%. This is consistent with the higher volatility expected from a higher returning asset class.

**More interestingly, and perhaps reassuring for investors who have suffered recently from equity falling from a cliff in 2008, we note that drawdowns of this magnitude have happened a few times in the past, proving that the current situation is not exceptional.**



Drawdowns of US equity between January 1871 and December 2009 (monthly data)



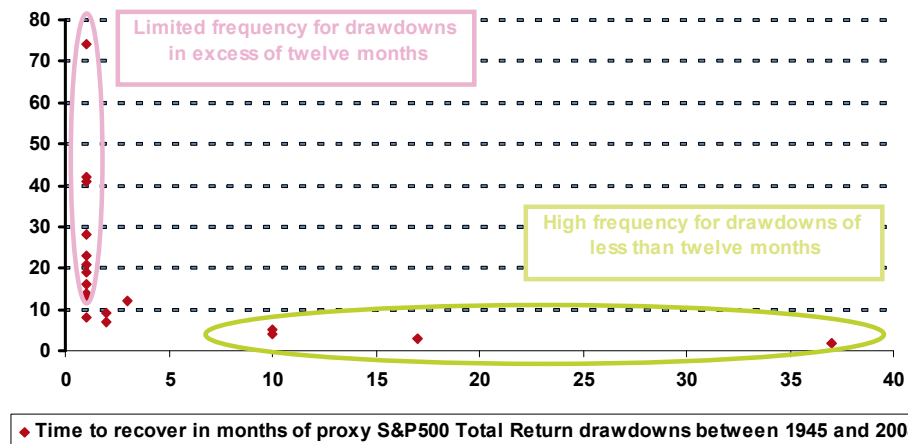
Source: Factset, Bloomberg and BNP Paribas Asset Management as of August 2010

...which is less pronounced for the long term investor

When analysing the time to recover of those US equity drawdowns, we find two interesting patterns:

- first there is a high frequency of drawdowns with a time to recover of less than twelve months. The risk of a negative return can therefore be greatly reduced with a medium term investment horizon
- second there is a limited frequency of drawdowns in excess of twelve months. In particular we find a couple of drawdowns with a time to recover of more than three years, as well as one drawdown with a time to recover of more than six years. **The risk of those drawdowns can be addressed but only with a true long term investment horizon, typically 10 years or more.** The limited frequency of such drawdowns has sometimes been problematic as, after periods of 10 to 20 years without significant drawdowns, risk averse investors with a medium term investment horizon have been lured into investing into equities.

Time to recover (Y axis in months) and frequency (X axis) of US equity drawdowns between 1945 and 2008



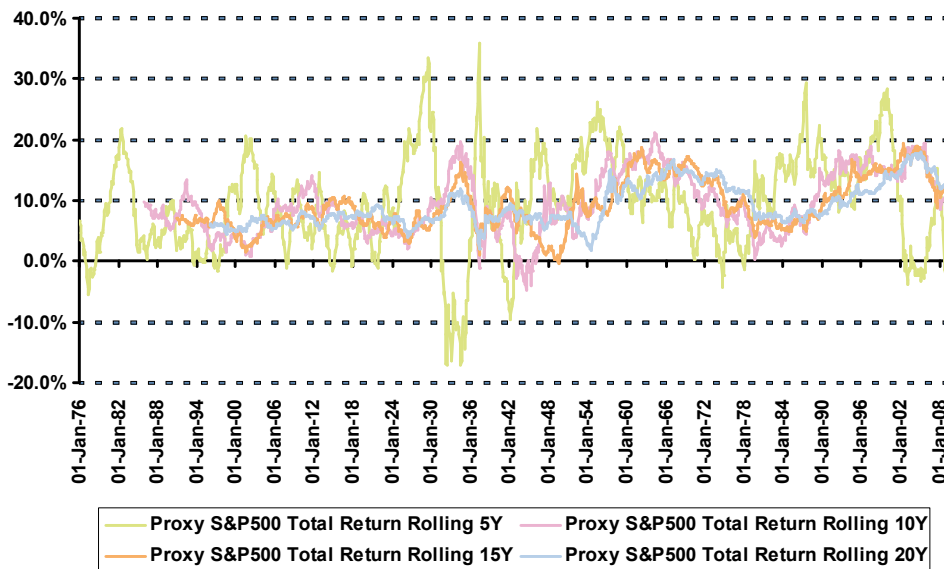
Source: Factset, Bloomberg and BNP Paribas Asset Management as of August 2010



The necessity for risk averse investors to consider equity investment with a true long term view is perfectly illustrated by the graph below. It shows the rolling 5/10/15/20 years return of investing in US equity from January 1876 to December 2009. As expected it shows that the longer the investment horizon, the smoother the average return. It brings also a few of interesting considerations:

- a 5 years investment horizon is delivering a very volatile performance with a few periods of significant negative returns
- a 10 years investment horizon is greatly improving the stability of the average return but still leaves the possibility of facing negative returns
- **a 15 or 20 years investment horizon will deliver a performance that is almost the same with consistent positive returns, even during periods of significant drawdowns**

Rolling 5/10/15/20 years return for US equity



Source: Factset, Bloomberg and BNP Paribas Asset Management as of August 2010



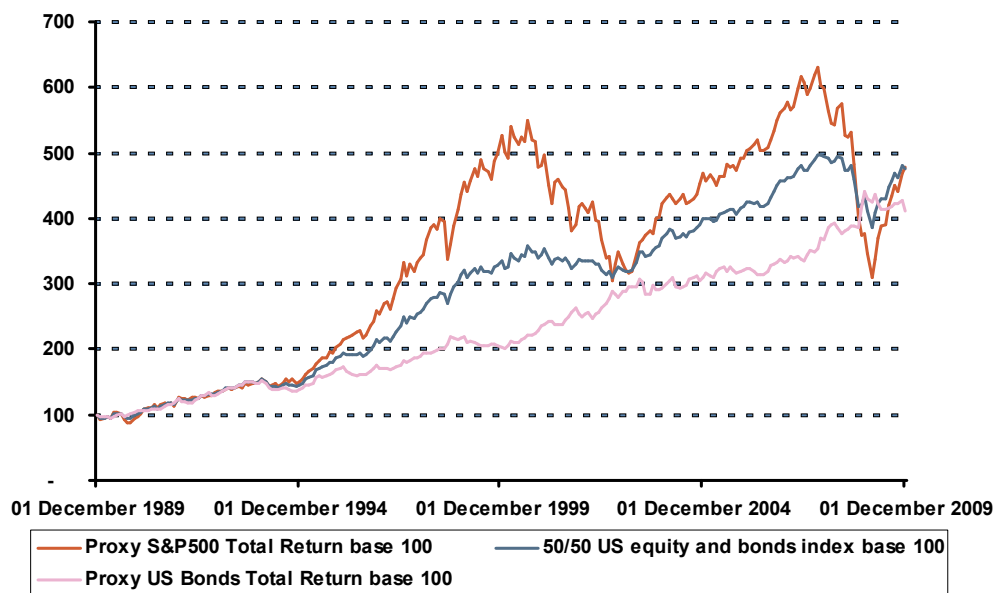
## INCLUDING EQUITY IN AN ASSET ALLOCATION

### A return enhancer...

In order to assess the opportunity to include equity in an asset allocation, we compare two simple allocations of US financial assets: one with 100% of bonds and one with 50% of bonds and 50% of equity. Rebalancing and performance measurement are done on a monthly basis.

The graph below shows the cumulative return of those two simple allocations on a 20 year basis, from December 1989 to December 2009. The total difference between the two allocations seems small due to the compounding effect. It nevertheless amounts to a difference of 64% (375% for the 50/50 allocation versus 311% for the pure bonds), which makes quite a difference for the investor: **adding equity to the asset allocation implies a return which is almost a fifth higher.**

Cumulative 20 years return for US equity, US bonds and balanced index 50/50 US equity/bonds

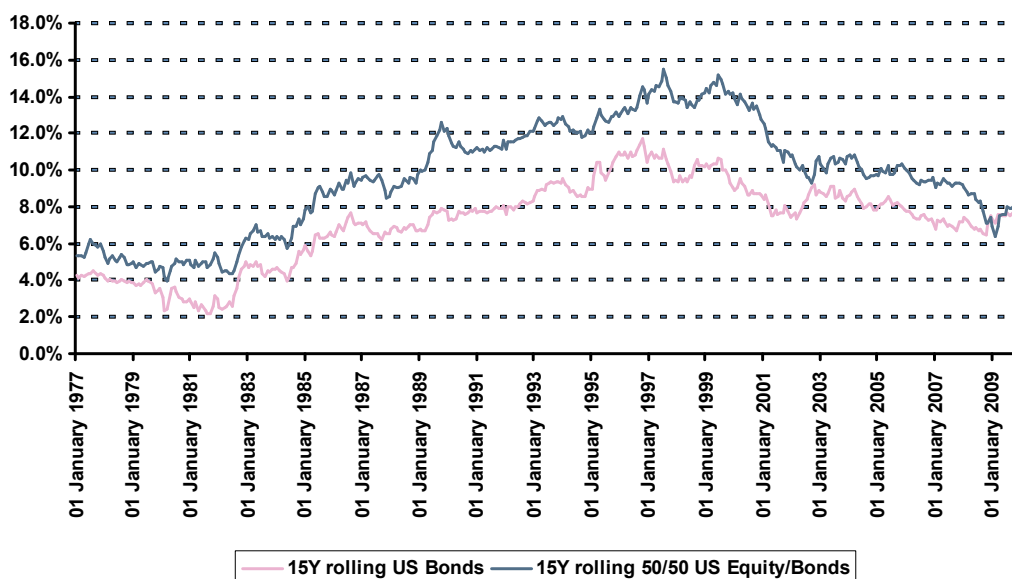


Source: Factset, Bloomberg and BNP Paribas Asset Management as of August 2010

People might argue that the outperformance of the balanced allocation might be concentrated into a very short period of time when looking at cumulative returns. That's why we have also plotted in the graph below the rolling 15 years return of the two allocations between January 1977 and December 2009. As seen, with the exception of the past couple of years which have witnessed an equity crash led by the financial crisis combined with a booming bonds market led by fears of deflation, the balanced allocation has always beaten the bonds allocation on a rolling 15 years basis.



15 years rolling return of US bonds and balanced index 50/50 US equity/bonds



Source: Factset, Bloomberg and BNP Paribas Asset Management as of August 2010

...with a risk under control over a long term investment horizon

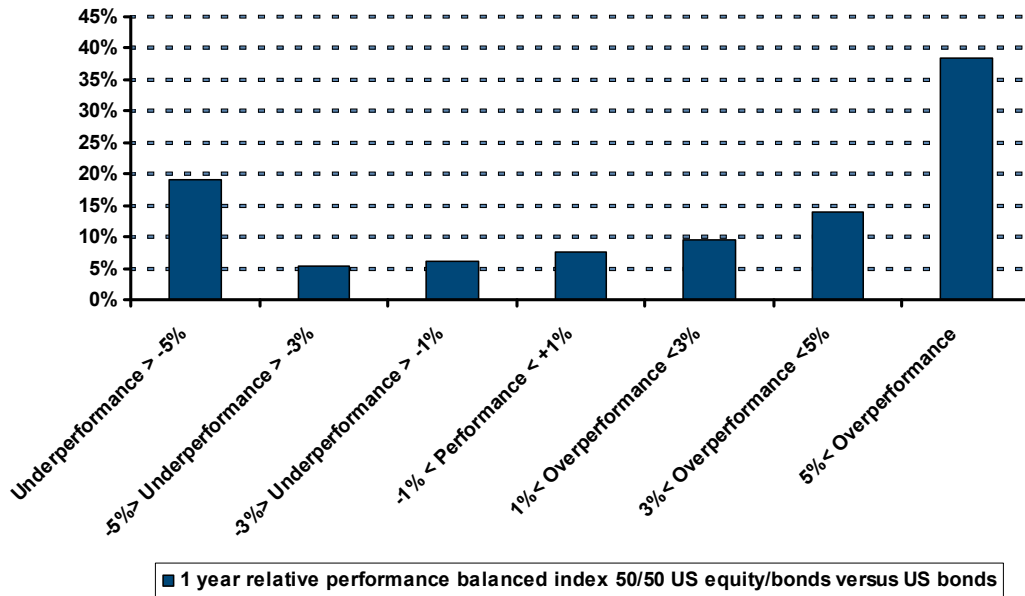
We have shown previously how a long term investment horizon is smoothing equity average return. We have attempted to quantify to what extent this smoothing effect is reducing the probability for a balanced allocation to underperform a pure bonds allocation. The two graphs below show the frequency with which a balanced 50/50 US equity and bonds is under or overperforming a pure US bonds allocation according to different range of under/overperformance (hence the total of the bars in each graph is 100%). In the first graph we have taken 1 year relative performance on a monthly basis from December 1962 to December 2009. In the second graph we have taken 15 years relative performance on a monthly basis from December 1976 to December 2009.

Whereas with a 1 year investment horizon there is a 19% frequency to see the balanced allocation underperforming the bonds allocation by more than -5%, there is a nil frequency to see the balanced allocation underperforming the bonds allocation by more than -1% with a 15years investment horizon. **In other words, with a true long term investment horizon, the risk to include equity in an asset allocation is tightly controlled.** The reduced uncertainty works both ways with also a nil frequency to see the balanced allocation overperforming the bonds allocation by more than +5%

It should be reminded that those calculations are made with historic data, including the latest market financial crisis.

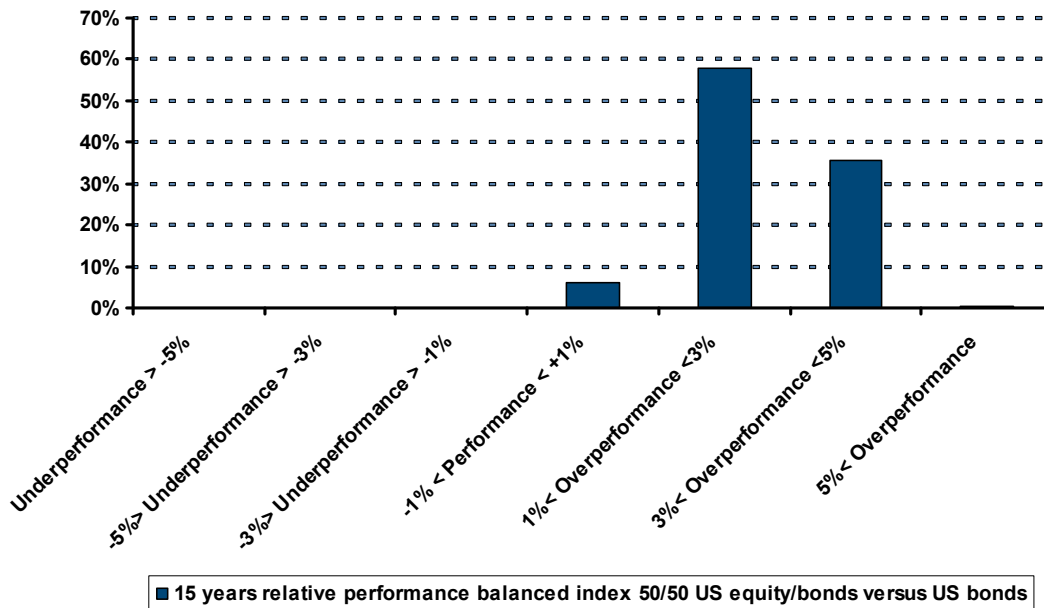


Frequency of the 1 year relative performance of the balanced index 50/50 US equity/bonds versus US bonds (number of times the relative performance is in the indicated range; monthly data)



Source: Factset, Bloomberg and BNP Paribas Asset Management as of August 2010

Frequency of the 15 year relative performance of the balanced index 50/50 US equity/bonds versus US bonds (number of times the relative performance is in the indicated range; monthly data)



Source: Factset, Bloomberg and BNP Paribas Asset Management as of August 2010



## EUROPEAN EQUITIES: ATTRACTIVE CHARACTERISTICS FOR BEING INCLUDED IN A LONG TERM ASSET ALLOCATION

### European equities currently offer a very high dividend yield

As shown in the table below, European equities offer by far the highest dividend yield of the main equity markets at 4.7% estimated for 2010. This yield is well supported by the strong cash-flow generation enjoyed by most European companies.

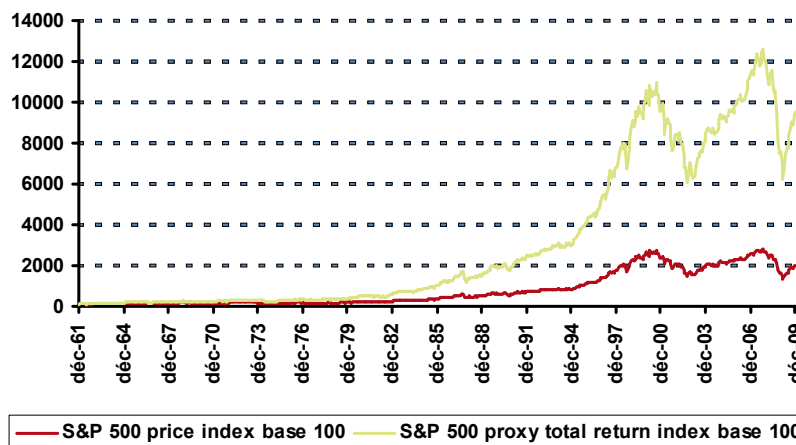
Compared valuation metrics for key equity indices

	PE		Div Yield
	2010E	2011E	2010E
US (S&P 500)	12.7	11	2.2%
Japan (Nikkei 225)	15.6	14.1	2%
China (Hang Seng)	13.3	11.5	3.3%
Brazil (Bovespa)	12.3	9.6	3.1%
Europe (Eurostoxx 50)	9.9	8.8	4.7%

Source: Bloomberg and BNP Paribas Asset Management as of 27 August 2010

The yield component has been historically the biggest contributor to the equity total return. As shown in the graph below, the total return of the S&P500 has been almost five times higher than its price return. **This bodes well for European equities which offer currently one of the strongest yields to investors.**

US equity price return and total return between December 1961 and December 2009



Source: Factset, Bloomberg and BNP Paribas Asset Management as of August 2010

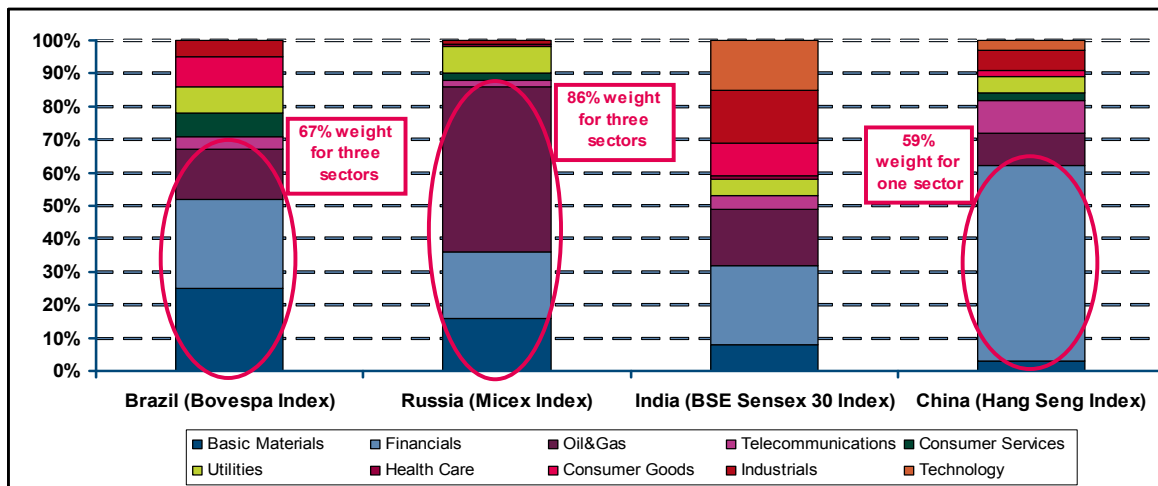


**European equities offer a high exposure to the world economic growth with a good diversification**

European companies are directly exposed to the world economic growth thanks to their strong positions in sectors like industrials and luxury goods, which are directly exposed to the booming emerging market economies, and because they belong to one of the world’s most open economies. Indeed, their average global financial exposure to emerging markets growth, as calculated by BNP Paribas Asset Management, is around 20%.

Furthermore, European equities offer a safe way to take advantage of emerging markets growth. First, they bring the legal safety of stock quotations in a zone with a tight regulatory framework. Second, they offer a combination of ample liquidity and optimal diversification. This latter point should not be underestimated, as emerging stock markets are often characterised by strong sector concentration as shown in the graph below.

Selected equity indices sector breakdown



Source: Bloomberg and BNP Paribas Asset Management as of 2 August 2010

**CONCLUSION**

We have demonstrated how including equity in an asset allocation is enhancing its return. This is an important feature for all investors who need the benefits of compounding positive returns to build enough savings for their retirement.

We have also shown how long term investing is greatly reducing the risk associated with equity investment. The main caveat of this statement is that true long term investment means holding periods in excess of 10 years, typically in the region of 15 to 20 years. Risk averse investors should therefore still consider investing in equity, but only provided they have a sufficiently long investment horizon.

Lastly we have indicated how European equities currently offer attractive characteristics to be included in a long term asset allocation thanks to their record yield, good exposure to emerging markets and strong diversification.

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