



building
shock resistant
portfolios



Why introduce Protected Strategies into a Client's Portfolio?

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For Portfolio Construction Conference 2010 Only.
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Agenda

- Lessons from the past
 - Re-cap on how to improve investment returns in a world of higher volatility and lower returns
 - Should tactical asset allocation be back in vogue?
- Review of academic literature
 - Black swans and the normality assumption
 - The impact of large swings and outliers on portfolio performance
- Implications for portfolio construction
 - Can capital protection provide a solution?
- Barclays Solution
 - DYNAMIC80 International Share Fund

Lessons from the Past

Improving Returns in a High Volatility, Low Return Environment

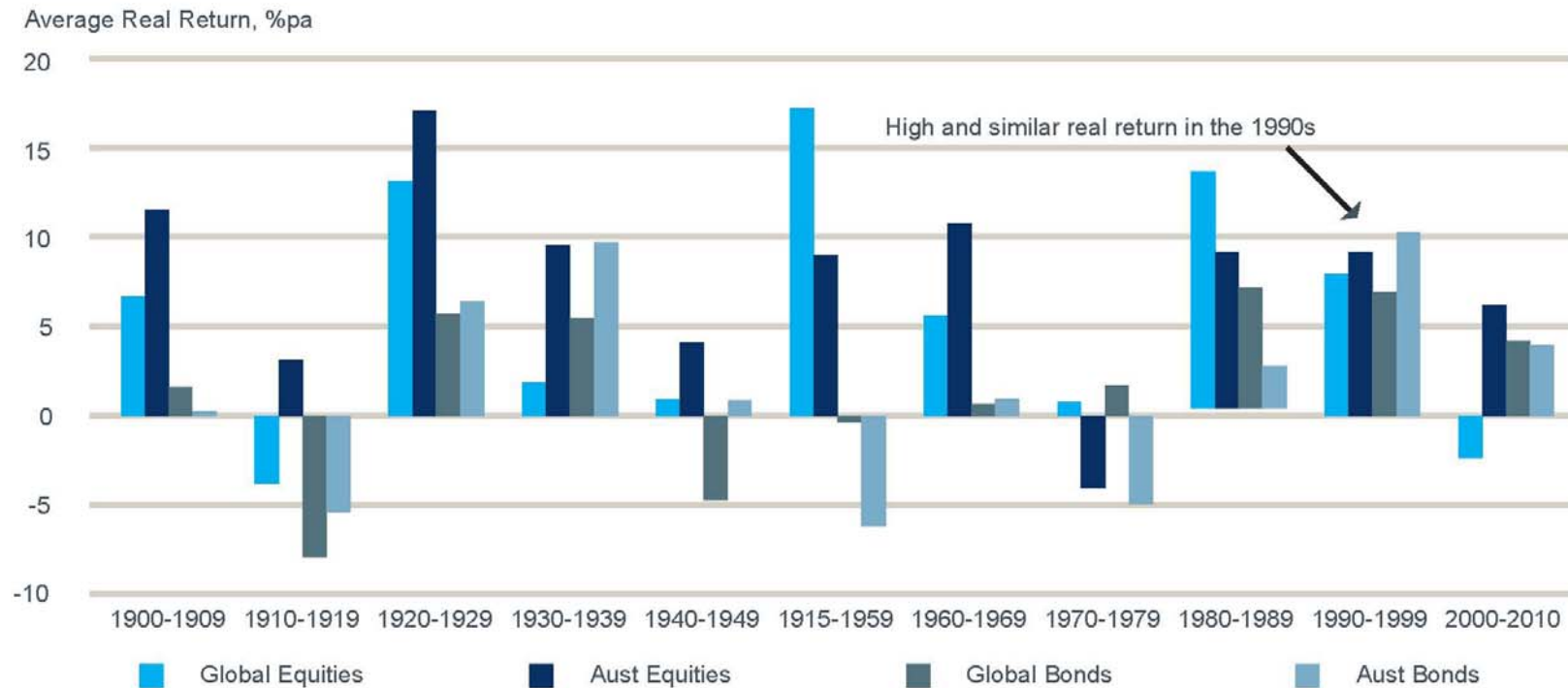


1. Expand asset class selection – include alternatives
2. Seek alpha – great manager selection OR if you have no skill in this, avoid negative alpha by indexing
3. Actively manage asset allocation
4. Use leverage

Lessons from the Past Should TAA be Back in Vogue?

- During the 1990s and early 2000s the focus was on manager selection, not TAA:
 - Real returns from most asset classes were very high – “time in, not timing the market” was the mantra
 - Bonds and equities positively correlated - little scope for TAA to enhance returns, nor much need for alternative investments
 - Perception that it was too difficult to enhance returns from TAA
 - Investment markets were viewed as efficient so the risk premium between asset classes held true
- Post tech-wreck:
 - Investment outlook more constrained, and returns mediocre
 - Cyclical swings in asset classes more evident and correlation between equities and bonds become negative
 - More asset classes now available – expands the scope for TAA to add value
 - View that markets are efficient has been overturned – irrational investors can create significant volatility in asset classes which alters their relative return potential
- 1990s style ‘buy and hold’ strategy won’t work so well -> the role of TAA should be back in vogue!

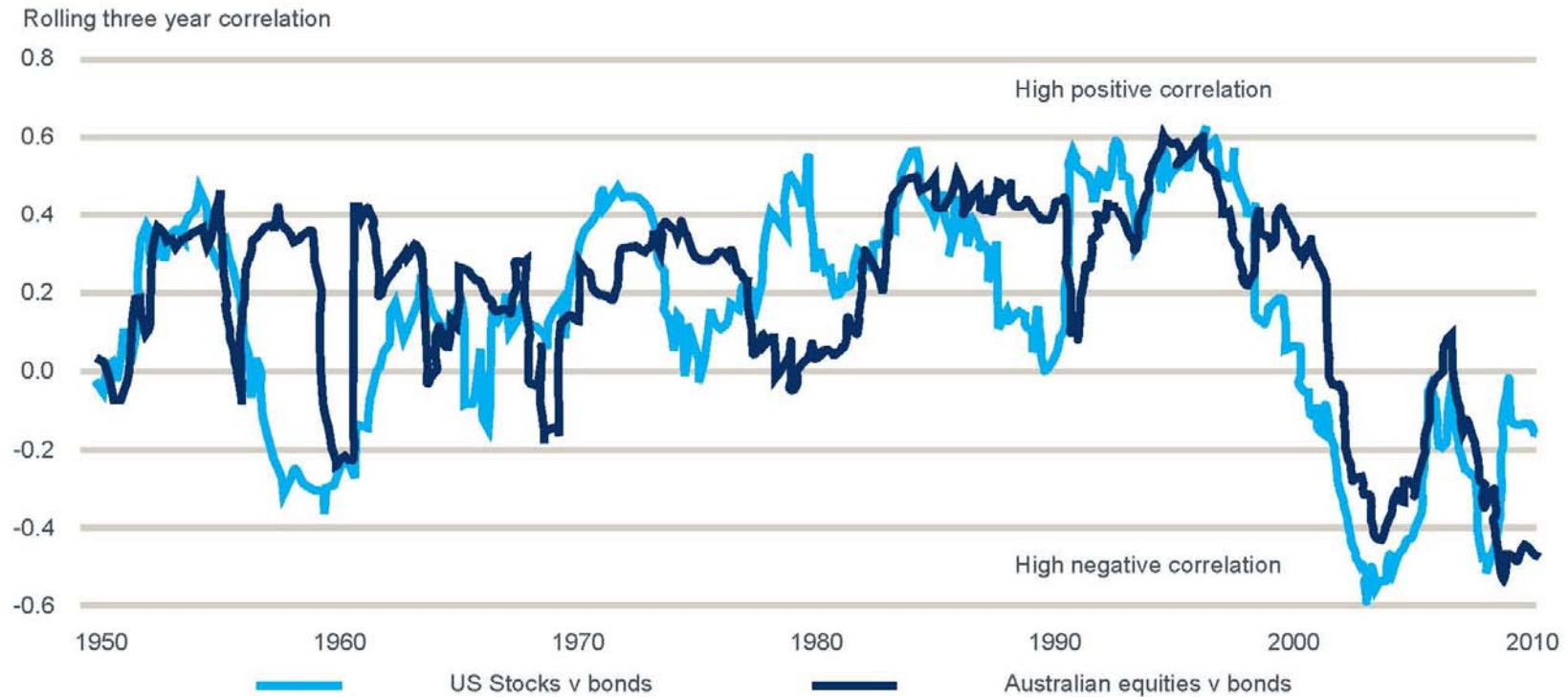
Lessons from the Past Should TAA be Back in Vogue?



Note: Global returns are in US\$.

Source: E. Dimson, P. Marsh & M. Staunton, *Global Investment Returns Yearbook*, London Business School/ABN Amro 2003. AMP Capital Investor.

Lessons from the Past Should TAA be Back in Vogue?



Source: Global Financial Data, Datastream and AMP Capital Investor.

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Lessons from the Past

How can TAA be implemented well?

- Need to understand how investors obtain their long-term returns and how they can best predict when to be in and out of the market:
 - Do investors obtain their long term returns smoothly and steadily over time, or is their long term performance largely determined by the return of just a few outliers?
 - Are investors likely to succeed in predicting the best days to be in and out of the market?
 - Is there a simpler and less risky way that investors can implement portfolios to capture or minimise the impact of outliers and volatility over the longer term without significantly affecting their returns?
 - Is there a systematic way to do this?

Review of Academic Literature

Black Swans and Normality Assumption

- Taleb (2007) defines a black swan event as an event with three attributes:
 - It is an outlier, lying outside the realm of regular expectations because nothing in the past can convincingly point to its occurrence (i.e. rare)
 - It carries an “extreme impact”
 - Despite being an outlier, plausible explanations for its occurrence can be found after the fact, thus giving it the appearance that it can be explainable and predictable (retrospective predictability)
 - Example: Black Monday, where the Dow fell 22.6% in one day
- Assumption of normally distributed returns pervasive in finance
 - Excludes the possibility of a black swan event or large swings in investment markets, assuming they would happen very rarely, if at all
 - Leads to an underestimate of risk
- Academic evidence of past 40+ years disputes the assumption of normally distributed returns: outliers are far more common than predicted by the normality assumption
 - The best and worst 10 days are more than 5 standard deviations away from the mean
 - Assumption of normality would have events of this magnitude occurring once every 13,954 years
- **Assuming normally distributed returns would have led investors to substantially underestimate risk in portfolio design. Investors need to take outliers into consideration when constructing portfolios**

Review of Academic Literature

Impact of Large Swings and Outliers on Portfolio Performance (1990-2006)

- Missed the best 10 days (0.23% of days considered)
 - Average reduction of 43% in terminal portfolio value across 15 markets
 - Reduction of 26% in terminal portfolio value for Australia
- Missed the best 100 days (2.34% of days considered)
 - Average reduction of 95% in terminal portfolio value across 15 markets
 - Reduction of 86% in terminal portfolio value for Australia
- Missed the worst 10 days (0.23% of days considered)
 - Average increase of terminal portfolio value by 88%
 - Increase of 53% in terminal portfolio value for Australia
- Missed the worst 20 days (0.47% of days considered)
 - Average increase of terminal portfolio value by 204%
 - Increase of 95% in terminal portfolio value for Australia
- Missed the worst 100 days (2.34% of days considered)
 - Average increase of terminal portfolio value by 6269%
 - Increase of 742% in terminal portfolio value for Australia

Massive impact from just a small number of days

Review of Academic Literature

Impact of Large Swings and Outliers on Portfolio Performance (1990-2006)

- Missed the best 10 days (0.23% of days considered)
 - Average mean return reduced to 1.9%pa from 5.5%
 - Australian mean return reduced to 5.6%pa from 7.5%
- Missed the best 100 days (2.34% of days considered)
 - Average mean return reduced to -13.6%pa from 5.5%
 - Australian mean return reduced to -4.3%pa from 7.5%
- Missed the worst 10 days (0.23% of days considered)
 - Average mean return increased to 9.4%pa from 5.5%
 - Australian mean return increased to 10.2%pa from 7.5%
- Missed the worst 100 days (2.34% of days considered):
 - Average mean return increased to 31%pa from 5.5%
 - Australian mean return increased to 22%pa from 7.5%

Massive impact from just a small number of days

Review of Academic Literature

Impact of Large Swings and Outliers on Portfolio Performance (1990-2006)



- Large daily swings and black swan events have a significant impact on long term performance outcomes AND they occur more often than the normality assumption would have us believe
- Missing the best 10 days in the equity markets resulted in portfolios c.51% less valuable than a passive portfolio
- Avoiding the worst 10 days in the equity markets resulted in portfolios c.150% more valuable than a passive portfolio
- Less than 0.1% of days considered swung long term portfolio returns by more than c.50% above or below those of a passive investment

Implications for Portfolio Construction Can Capital Protection Provide a Solution?

1. Adjust to the existence of black swans rather than trying to predict them – focus on the potential consequences
2. Clearly there is good money to be made from market timing, particularly by avoiding the worst days in the market, yet logic tells us that given a very small number of days account for the enormous creation and destruction of wealth, the likelihood of successfully predicting the right times to be in and out of the markets is slight - how can this be managed?



- Ignore it – and accept the passive return

OR

- Manage the tactical asset allocation – and limit the downside risk

Implications for Portfolio Construction

TAA and Downside Risk Management Using Capital Protected Solutions



1. Buy a put over the asset with the exercise price struck at the desired level of protection
 - Provides downside protection, but no TAA

2. Combine a zero coupon bond with call options to synthetically replicate the underlying asset
 - Provides downside protection, but no TAA

3. CPPI (constant portfolio protection insurance)
 - Provides downside protection plus TAA
 - Black swan events transfer risk to the offeror

Principal Protected CPPI Strategies

Benefits of the Second Generation

Traditional Principal Protected Strategies

Fixed investment term with principal protection at maturity and potential For cash lock

Sensitivity to market parameters: performance of underlying, interest rates and implied volatility

Difficult to administer and include in portfolio construction
Break costs

Second generation capital protected strategies overcome the shortcomings of traditional protected products

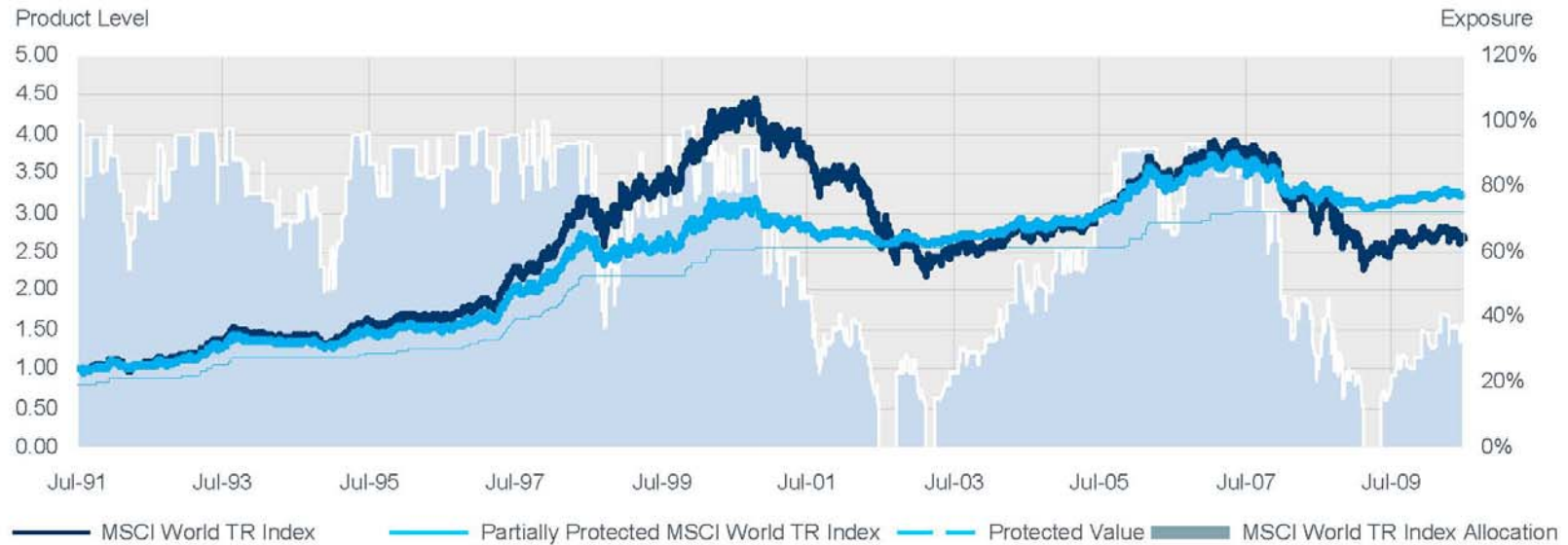
Second Generation Protected Strategies

Open-ended product with continuous protection and no cash lock

Sensitivity only to performance of underlying; protection from interest rates and implied volatility

Platform friendly and easy to include in portfolios
Daily liquidity
No break costs

Second Generation Protected Strategy Example MSCI World Index in AUD, 1990 - 2010



	Annualised Return	Annualised Volatility	NAV as of Jul-10	Protected Amt. as of Jul-10
MSCI World TR	5.28%	15.91%	265.75%	0.00%
Protected Strategy	6.37%	9.81%	323.67%	301.17%

■ Assumes maximum multiplier of 5.5 times and cash rate of 4% p.a.

Source: Barclays Capital, Jul 2010.

Conclusion

- Lessons from the past and academic literature suggest
 - We should re-commence using TAA as a tool in portfolio construction
 - Avoiding the worst days in markets improves portfolio outcomes significantly compared to participating in the best days or simply holding a passive portfolio
- Second generation capital protection using CPPI technology wraps TAA and downside protection into one easy solution
 - Includes the ability to transfer risk with a black swan event
 - Systematic TAA process protects against large downward swings in the market
 - Format complements an adviser's existing business model

Barclays Solution

Barclays DYNAMIC80 International Share Fund

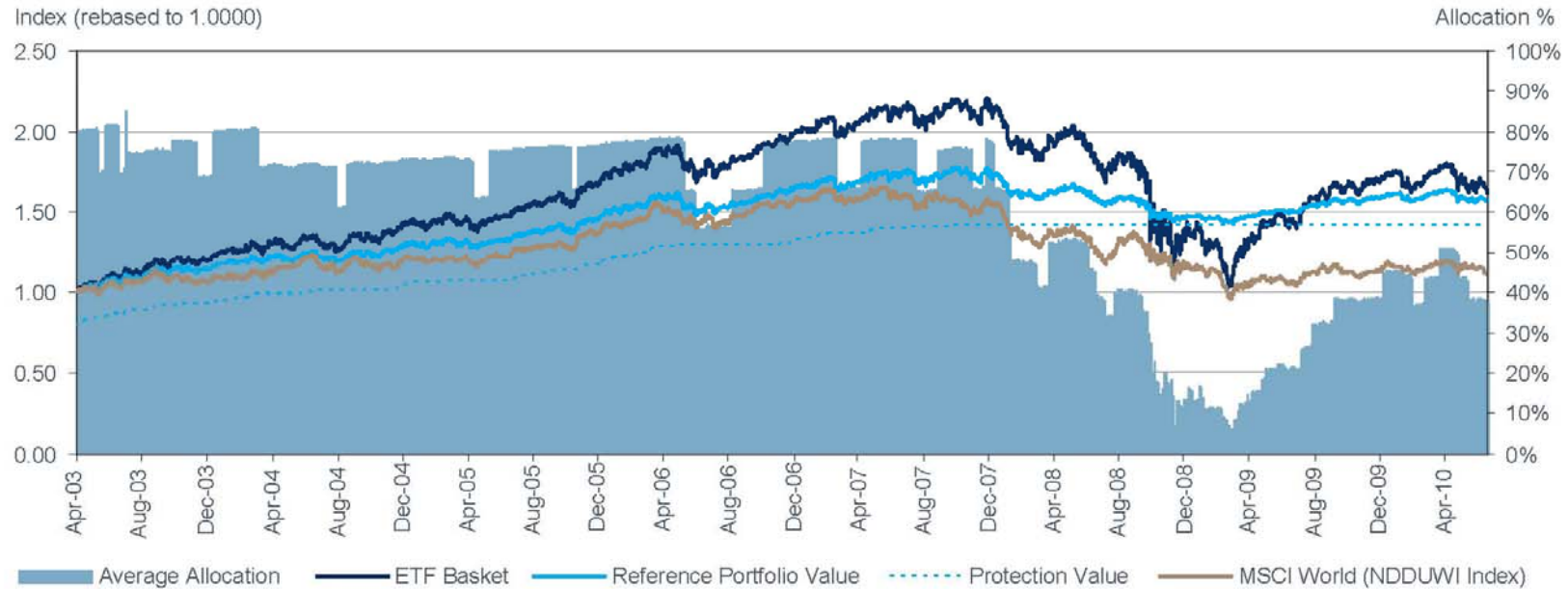


Portfolio Diversification	diversified exposure to global equity markets, including America, Europe, Asia, Australia and emerging market countries
Continuous 80% protection	aims to maximise returns whilst providing peace of mind with 80% ¹ of your investment protected every day
Daily liquidity	Open-ended unit trust offering daily pricing and daily liquidity; accessible via IDPS and IDPS-like services
Low to medium volatility	to be achieved by adjusting the exposure to the Reference Portfolio on each Dealing Day
Potential income and growth	potential semi-annual cash distribution payments from diversified basket of global equities

¹The 80% protection applies to the Net Value of the Reference Portfolio and does not apply to the Net Asset Value (the "NAV") of the Fund. The Fund may not have 80% of its highest NAV ever achieved protected as the Fund NAV is impacted by the payment of Distributions, management costs and the timing of cash flows. In addition, in the circumstances set out in Section 10.9 of the Product Disclosure Statement (the "PDS"), the terms of the deferred purchase agreement (the "DPA") may be adjusted or it may be terminated which would mean that the 80% protection of the Reference Portfolio ceases.

Barclays DYNAMIC80 International Share Fund

April 2003 – June 2010



	MSCI World (NDDUWI Index)	ETF Basket	DYNAMIC80
Annualised Return	1.47%	6.81%	6.36%
Annualised Volatility	15.86%	26.06%	10.82%
Return/Volatility	0.09265	0.26112	0.58753
End Value	111.11%	160.91%	156.11%
End Protected Value	0%	0%	142.05%

Past performance of the Fund is not indicative of future performance

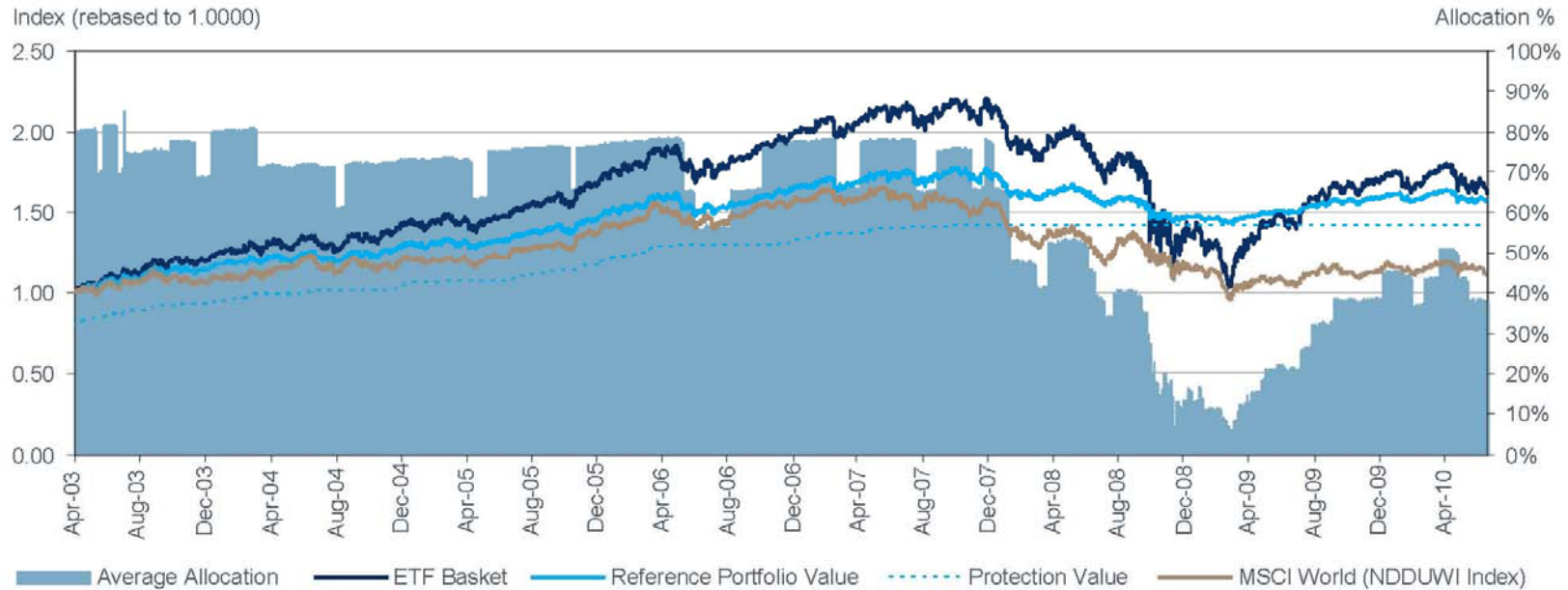
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Q & A



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