P. M. Murphy

Independent Investment Advice

Agenda

- About P. M. Murphy Ltd.
- Explaining structured products to retail clients.
- Main types of structured products.
- The role of structured products in portfolios.
- Future opportunities.

About us

- P. M. Murphy Ltd. was established in October 2011 and is wholly owned by Peter Murphy.
- The company was authorised as an *authorised advisor* by the Central Bank of Ireland in May 2012.
- As an authorised advisor we are independent and not tied to any institution (and so can recommend products from any institution globally.)

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What we do

- **Investment advice** and portfolio construction mainly for HNW clients on a fee-only basis (RDR does not exist in Ireland).

- **Distribution** of investments (structured products and funds) to other advisers, stockbrokers and so on.

- **Sub-advisory** mandates to funds. For example, a multi-asset fund looking to run a structured product strategy within the fund.

Advice – How we do it

- We have our own asset valuation model.
- We form a global view from this and our broader research.
- Global view + specific client requirements, risk preferences and so on = a bespoke portfolio for each client (no "model portfolios").

Asset classes we cover

- Equities.
- Bonds (including loan notes (private companies)).
- Alternatives.
- Structured products.
- Property, direct and indirect.
- Private equity.

- Invest via:
  - ETFs, funds, structured products: Notes, warrants etc.

What we say to clients

- Investing is a probabilistic pursuit.
  - Thus we <u>will</u> be wrong sometimes!
- We have a strong understanding of those probabilities.
  - But we have no predictive powers!
- Our job therefore is:
  - To assess and understand those probabilities
  - Put our clients in the way of probable outcomes
  - and skew the probabilities slightly in the client's favour.

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The 10% question

- Would you rather:
  - A) a 10% return, or
  - B) a 10% return?
- In order to get return (A) you must bet 2 cows.
- In order to get return (B) you must bet the whole farm.
- A and B are therefore not equal.

The 10% question

- Assuming that the risk required to be taken to attain:
  - A) a 10% return, or
  - B) a 10% return?
- Is the same…….. But…. Historically, 10% return "A" occurs significantly more frequently than B….. then
- The two 10% are not equal.

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The 10% question

- So, what I want as an investor is:

- A 10% return, with the lowest risk of loss…. And….

- An investment where the incidence of that 10% occurring is higher than the alternative.

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Most common SPs

- Autocallable bonds = 65-70% of market (my estimate (UK market))
  - Classic autocall based off an index or indices
  - Defensive autocall (index or indices)
  - The above but the underlying is a stock basket
- Reverse convertible.
  - Coupon of (say) 6% annually as long as the underlying index is above say 80% of its starting level
- Hybrid of those two: Autocallable above 100%, coupon payable above 80% and a European protection barrier above 60%
- Not so common but very interesting: Twin win on an index i.e. straddle
- All of the above have conditional capital protection, usually between 50-70% of strike and can be American but most often European barrier.

A classic autocall

- 5 year term (but with liquidity)
- Underlying: Eurostoxx 50
- Annual autocall above 100% of initial level
- Coupon of 9% (with memory feature – if not paid in one year can be paid in subsequent years)
- 60% European barrier

- Most used underlyings:
  - FTSE 100
  - Eurostoxx 50
  - SPX

Another example

- Four indices underlying
- 2 year term
- USD
- Annual autocall above 100% of initial levels on all indices
- 1% per month coupon if all indices above 80%
- 50% European barrier, sum of underlying performances at maturity

Stock example

- Four (very volatile) stocks underlying
- 2 year term
- EUR
- Annual autocall above 100% of initial levels on all stocks
- 9.35% coupon per quarter with memory feature if all stocks above 65%
- 65% European barrier, “worst of” in terms of capital risk

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Twin Win – example

- Eurostoxx 50
- 4 year term
- EUR
- At maturity: 2 times the upside (up to 30% i.e. 60%) or 1 times positive participation in the downside (up to minus 30%)
- During the term: more or less delta one tracker
- 70% American barrier

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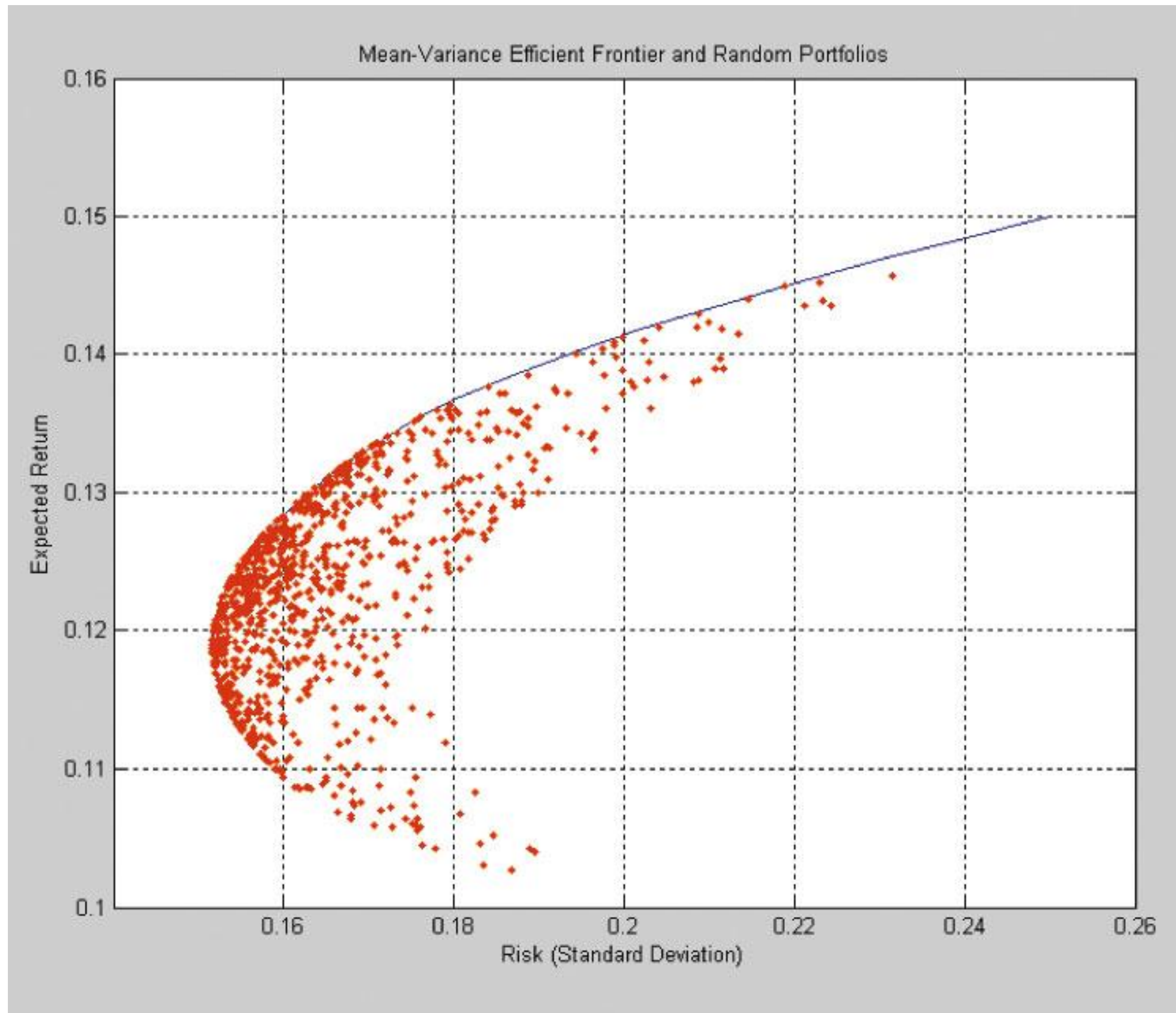
How we see portfolios



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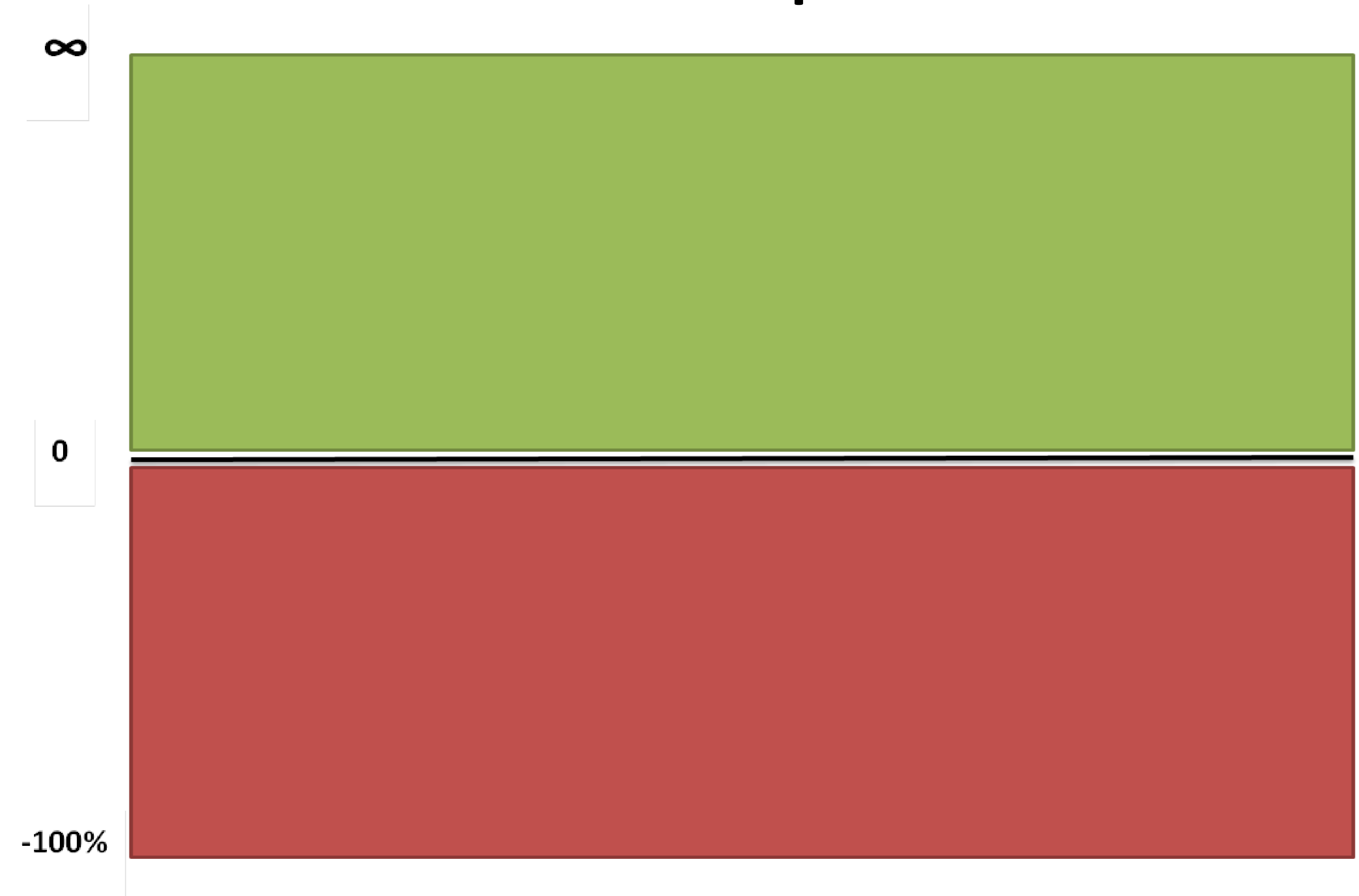
How clients see portfolios



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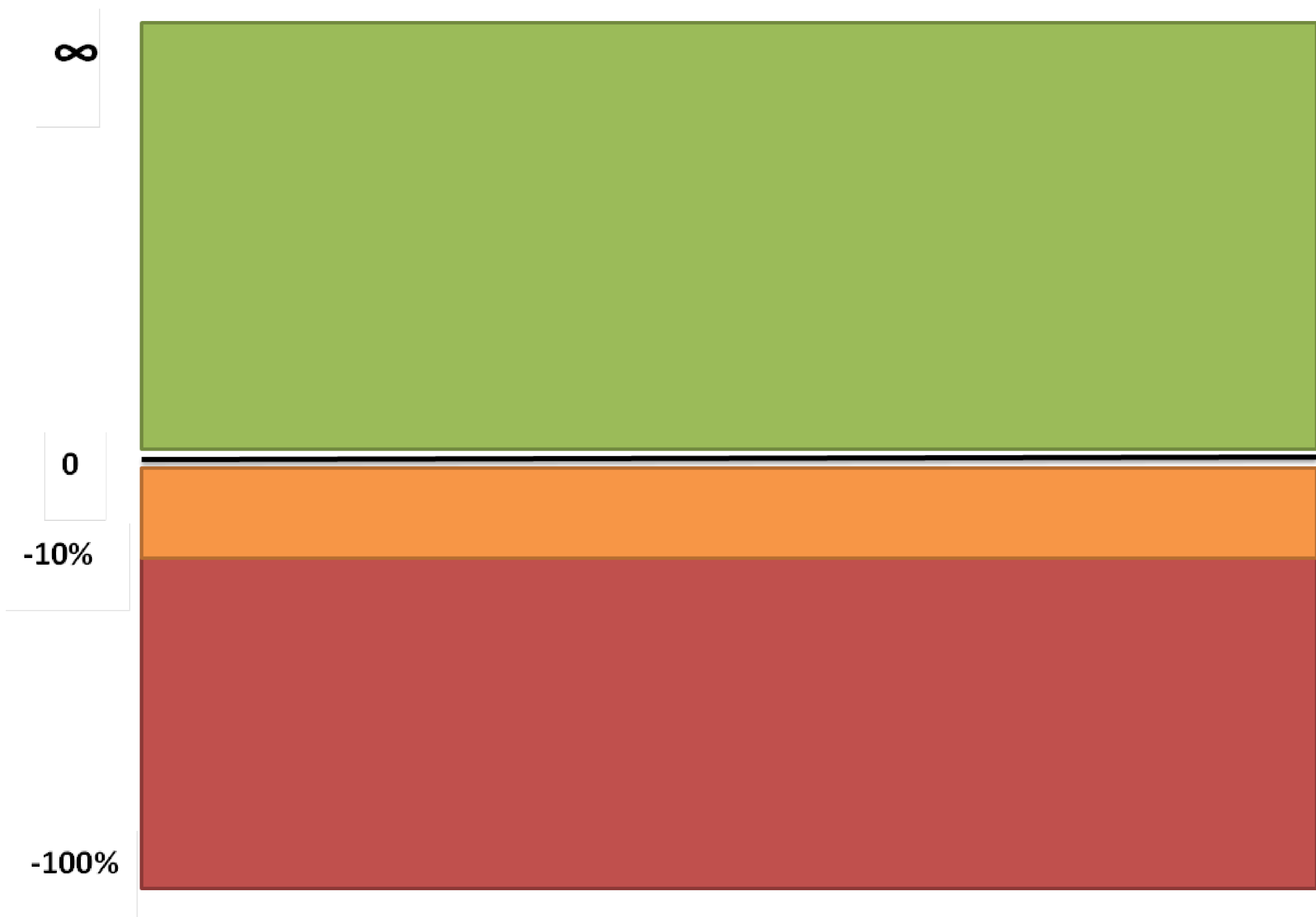
Portfolio with defensive A/call



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Portfolio with twin win (and A/call)

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Going back to the 10% question

	Number of cycles	Percentage
Number of 6 year cycles tested	5209	
Number of times the product would have returned a loss	28	0.54%
Number of times amount invested returned only	559	10.73%
Number of times the product would have made a investment return	4622	88.73%
Number of times an investment return would have occurred in year 1	3510	67.38%
Number of times an investment return would have occurred in year 2	489	9.39%
Number of times an investment return would have occurred in year 3	192	3.69%
Number of times an investment return would have occurred in year 4	269	5.16%
Number of times an investment return would have occurred in year 5	85	1.63%
Number of times an investment return would have occurred at maturity	77	1.48%

So, why use A/calls

- Asymmetrical payoff;
- Yield..!!!
- Adds an element of capital protection;
- Allows for bounded outcomes i.e. one has a better sense of the outcome from the start;
- Defensive a/calls and twin wins allow for a positive participation in negative markets.

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Defensive autocall – PMU 6

- PMU6 is a new Defensive Autocall product that is linked to the performance of 2 indices:

Russell 2000

FTSE EPRA Euro Zone

- It has a 6 year investment term but can expire early in years 1-5
- On expiry PMU6 can pay a Gross Return equivalent to 10% per year
- Capital is at risk if PMU6 has not expired before and one of the Underlying index has fallen by more than 40% during the life of the product
- Available for trading at a fixed price of €100 per unit until September 19th, 2014
- After this date, PMU6 will trade like a share on the London Stock Exchange

Key Characteristics of PMU6			
Underlying Assets:	Worst of Russell 2000 and FTSE EPRA Euro Zone	Issue Price:	€100 per unit
Maturity:	September 28th, 2020	Initial Valuation Date:	September 19st, 2014
Potential Gross Return:	10% of the Issue Price (not compounded) per year	Final Valuation Date:	September 21st, 2020

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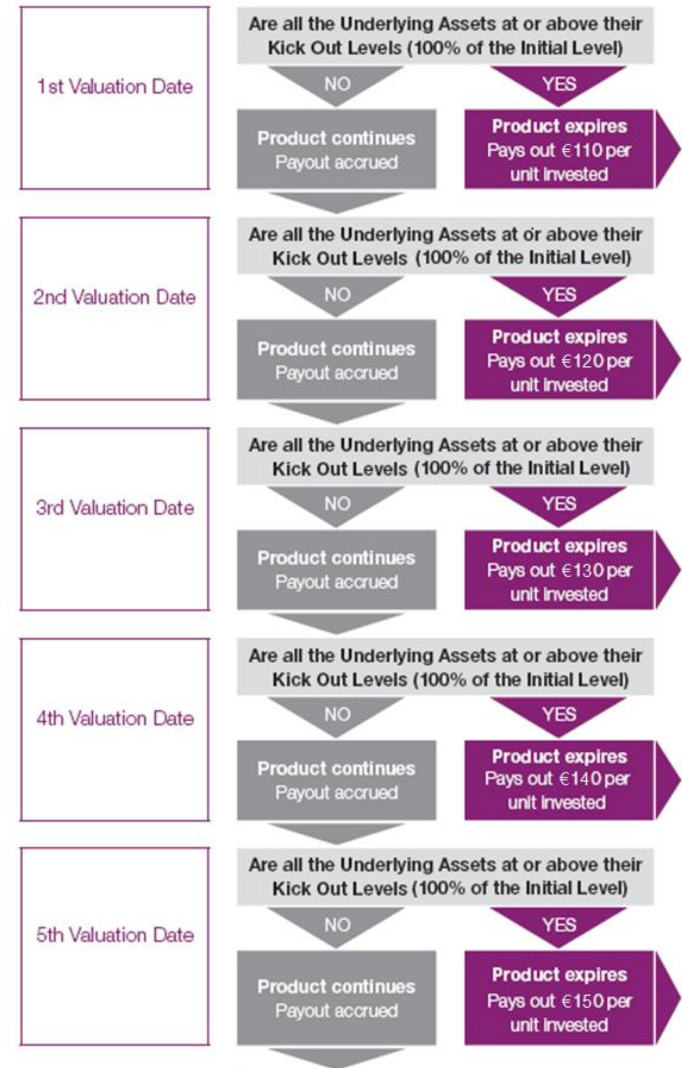
How does a Kick Out occur on A Valuation Date?

- The indices initial levels will be recorded on 19 September.
- To Kick Out on the Valuation Date, the two indices levels must all be at or above their Kick Out Level
- If the product Kicks Out, investors will receive a Gross Return equivalent to 10% per year (not compounded) plus their capital back
- The product will expire at this point



What IF PMU6 HAS NOT EXPIRED EARLY?

- If the index levels have never all been at or above their Kick Out Levels on any one of the five Valuation Dates between year 1 and year 5, PMU6 will mature after 6 years.

- In this case, the Gross Return and return of capital are determined based on three scenarios:

1. If on the Final Valuation Date, the two Underlying indices are at or above Final Kick out Level (80% of initial level), holders will receive €160 per unit

2. If on the Final Valuation Date, the worst performing Underlying is lower than Final Step Down level (80% of initial level), but both indices always closed at or above their Protection level (60% of initial level), holders will receive €100 per unit

3. If on the Final Valuation Date, the worst performing Underlying is lower than Final Step Down level (80% of initial level) and if one of the indices closed below its Protection Level (60% of initial level) during the life of the product, holders will receive at maturity €100 per unit multiplied by the negative performance of the worst performing index.

The future?

- More institutional use of SPs;
- Wider variety of underlyings;
- Better quality product (when interest rates go up!);
- Alternatives to using a zero coupon bond as the capital protection??