# Interactive Guide to Autocallable Structured Products

## Introduction

This guide will help you understand how an autocallable structured product works on a quarter-by-quarter basis. We'll use a hypothetical 3-year (36-month) product with quarterly observations to illustrate all possible scenarios. The unique aspect of this guide is that you, the investor, get to choose the underlying stocks and the coupon rate, making this a truly personalized learning experience.

## Product Parameters

- Duration: 36 months

- Underlying Assets: [Client to choose 3-4 stocks]

- Autocall Trigger: 100% of initial level

- Coupon Barrier: 50% of initial level

- Protection Barrier: 50% of initial level (observed at maturity only)

- Coupon Rate: [Client to specify]

- Memory Feature: Yes

- One Star Feature: Yes

## Interactive Setup

Before we begin, let's personalize your autocallable product:

1. Choose 3-4 stocks you're interested in:

[Client input required]

2. Specify your desired coupon rate (as a percentage per annum):

[Client input required]

With these choices, we'll create a custom scenario just for you.

## Quarterly Scenarios

### Quarters 1-3 (Months 3, 6, 9)

In the first year, only coupon payments are observed. Autocall is not yet active.

Scenario 1: All chosen stocks ≥ 50% of initial level

- Outcome: Coupon paid at your specified rate

- Next step: Continue to next quarter

Scenario 2: Any chosen stock < 50% of initial level

- Outcome: No coupon paid (but recorded in memory)

- Next step: Continue to next quarter

### Quarters 4-11 (Months 12, 15, 18, 21, 24, 27, 30, 33)

From the second year onwards, both coupon and autocall are observed.

Scenario 1: All chosen stocks ≥ 100% of initial level

- Outcome: Product autocalls. You receive:

- 100% of initial investment

- Current coupon at your specified rate

- Any memory coupons

- Product ends

Scenario 2: Worst performing stock among your choices is between 50% and 100% of initial level

- Outcome: Coupon paid at your specified rate + any memory coupons

- Next step: Continue to next quarter

Scenario 3: Worst performing stock among your choices < 50% of initial level

- Outcome: No coupon paid (but recorded in memory)

- Next step: Continue to next quarter

### Quarter 12 (Month 36 - Maturity)

If the product reaches maturity, there are several possible outcomes:

Scenario 1: All your chosen stocks ≥ 100% of initial level

- Outcome: You receive:

- 100% of initial investment

- Final coupon at your specified rate

- Any memory coupons

Scenario 2: Worst performing stock among your choices is between 50% and 100% of initial level

- Outcome: You receive:

- 100% of initial investment

- Final coupon at your specified rate

- Any memory coupons

Scenario 3 : Worst performing stock among your choices < 50% of initial level, but best performing stock ≥ 100% (One Star Feature)

- Outcome: You receive:

- 100% of initial investment

- No final coupon

Scenario 4: All your chosen stocks < 100%, and worst performing stock < 50% of initial level

- Outcome: You receive:

- (Final level of worst performer / Initial level) \* Initial Investment

- No final coupon

## Memory Feature Explained

The memory feature allows for recovery of previously unpaid coupons. Here's how it works:

- If a coupon is missed in one quarter, it's recorded in the "memory".

- In any future quarter where the coupon condition is met, you receive:

- The current quarter's coupon

- All previously missed coupons

Example (using your chosen coupon rate):

- Q1: Coupon paid

- Q2: No coupon (to memory)

- Q3: No coupon (to memory)

- Q4: Coupon condition met - You receive 3 times your chosen coupon rate (current + 2 from memory)

## Interactive Learning

Now that you've personalized your product, let's explore some scenarios:

1. "If in the 6th quarter, the worst-performing stock among your choices is at 65% of its initial level, what happens?"

2. "At maturity, if the worst stock among your choices is at 45% and the best is at 102%, what's the outcome?"

3. "If no coupons were paid for 3 quarters, and then conditions are met in the 4th quarter, how much coupon would you receive in total?"

Feel free to ask about any specific scenarios you're curious about, using your chosen stocks and coupon rate!

# Autocallable Product Guide: 50% Coupon Barrier, 50% Protection Barrier, No One Star

## Product Parameters

- Duration: 36 months (3 years)

- Underlying Assets: [Client to choose 3-4 stocks]

- Autocall Trigger: 100% of initial level

- Coupon Barrier: 50% of initial level

- Protection Barrier: 50% of initial level (observed at maturity only)

- Coupon Rate: [Client to specify]

- Memory Feature: Yes

- One Star Feature: No

## Quarterly Scenarios

### Quarters 1-3 (Months 3, 6, 9)

In the first year, only coupon payments are observed. Autocall is not yet active.

Scenario 1: All chosen stocks ≥ 50% of initial level

- Outcome: Coupon paid at your specified rate

- Next step: Continue to next quarter

Scenario 2: Any chosen stock < 50% of initial level

- Outcome: No coupon paid (but recorded in memory)

- Next step: Continue to next quarter

### Quarters 4-11 (Months 12, 15, 18, 21, 24, 27, 30, 33)

From the second year onwards, both coupon and autocall are observed.

Scenario 1: All chosen stocks ≥ 100% of initial level

- Outcome: Product autocalls. You receive:

- 100% of initial investment

- Current coupon at your specified rate

- Any memory coupons

- Product ends

Scenario 2: Worst performing stock among your choices is between 50% and 100% of initial level

- Outcome: Coupon paid at your specified rate + any memory coupons

- Next step: Continue to next quarter

Scenario 3: Worst performing stock among your choices < 50% of initial level

- Outcome: No coupon paid (but recorded in memory)

- Next step: Continue to next quarter

### Quarter 12 (Month 36 - Maturity)

If the product reaches maturity, there are several possible outcomes:

Scenario 1: All your chosen stocks ≥ 100% of initial level

- Outcome: You receive:

- 100% of initial investment

- Final coupon at your specified rate

- Any memory coupons

Scenario 2: Worst performing stock among your choices is between 50% and 100% of initial level

- Outcome: You receive:

- 100% of initial investment

- Final coupon at your specified rate

- Any memory coupons

Scenario 3: Worst performing stock among your choices < 50% of initial level

- Outcome: You receive:

- (Final level of worst performer / Initial level) \* Initial Investment

- No final coupon

## Key Differences and Considerations

1. Lower Coupon Barrier (50%):

- Increased likelihood of receiving coupons, as stocks can fall further before coupon payments stop.

- Potentially lower coupon rate compared to products with higher barriers, due to reduced risk.

2. Lower Protection Barrier (50%):

- Capital is protected as long as no stock falls below 50% at maturity.

- Increased downside protection compared to products with higher barriers.

3. No One Star Feature:

- At maturity, only the worst-performing stock is considered for capital protection.

- If the worst stock is below 50% at maturity, capital is at risk, regardless of other stocks' performance.

4. Risk-Return Trade-off:

- Lower barriers provide more protection and higher likelihood of coupon payments.

- This increased safety might be balanced by a lower potential coupon rate.

## Example Scenarios

1. Consistent Moderate Decline:

- All stocks gradually decline to 60% of initial level by maturity.

- Outcome: Full capital protection, all coupons paid.

2. Single Stock Crash:

- Three stocks stay above 80%, one falls to 40% by maturity.

- Outcome: Capital loss of 60%, some coupons might be missed.

3. Recovery After Decline:

- Stocks fall below 50% in year 2, recover to 70% by maturity.

- Outcome: Full capital protection, missed coupons potentially recovered through memory feature.

4. Autocall in Late Stages:

- Stocks hover between 50-99% for most of the term, then exceed 100% in quarter 10.

- Outcome: Early redemption, full capital return, all coupons paid including memory coupons.

## Interactive Learning

Consider these questions based on your chosen stocks and coupon rate:

1. "If your worst-performing stock is at 45% of its initial level for two quarters, then recovers to 55%, what happens with your coupon payments?"

2. "At maturity, if your worst-performing stock is at 49% of its initial level, how much of your initial investment do you receive back?"

3. "How does the 50% coupon barrier affect your potential for receiving regular income compared to a product with a 60% barrier?"

Feel free to ask about any specific scenarios you're curious about, using your chosen stocks and coupon rate!

# Step-Down Autocall Feature: Comprehensive Guide with Examples

## Product Parameters

- Duration: 36 months (3 years)

- Underlying Assets: [Client to choose 3-4 stocks]

- Initial Autocall Trigger: 100% of initial level

- Step-Down: 5% per quarter, starting from year 2

- Coupon Barrier: 50% of initial level

- Protection Barrier: 50% of initial level (observed at maturity only)

- Coupon Rate: [Client to specify]

- Memory Feature: Yes

## Autocall Trigger Schedule

- Quarters 1-4 (Year 1): 100% (no autocall in first year)

- Quarter 5 (Month 15): 95%

- Quarter 6 (Month 18): 90%

- Quarter 7 (Month 21): 85%

- Quarter 8 (Month 24): 80%

- Quarter 9 (Month 27): 75%

- Quarter 10 (Month 30): 70%

- Quarter 11 (Month 33): 65%

- Quarter 12 (Month 36): 60%

## Scenario Examples

Let's explore various scenarios using this step-down feature. We'll assume you've chosen 4 stocks: A, B, C, and D.

### Scenario 1: Early Autocall

Quarter 5 (Month 15):

- Stock A: 98%, B: 102%, C: 97%, D: 96%

- Autocall Trigger: 95%

- Outcome: Product autocalls. You receive 100% of initial investment plus coupon.

### Scenario 2: Autocall After Several Step-Downs

Quarter 8 (Month 24):

- Stock A: 85%, B: 88%, C: 82%, D: 81%

- Autocall Trigger: 80%

- Outcome: Product autocalls. You receive 100% of initial investment plus coupon.

### Scenario 3: Late Autocall

Quarter 11 (Month 33):

- Stock A: 70%, B: 75%, C: 68%, D: 66%

- Autocall Trigger: 65%

- Outcome: Product autocalls. You receive 100% of initial investment plus coupon.

### Scenario 4: No Autocall, Reaches Maturity

Quarter 12 (Month 36):

- Stock A: 62%, B: 58%, C: 55%, D: 59%

- Final Autocall Trigger: 60%

- Outcome: No autocall. Product reaches maturity.

- Since all stocks are above 50%, you receive 100% of initial investment plus final coupon.

### Scenario 5: No Autocall, Capital Loss at Maturity

Quarter 12 (Month 36):

- Stock A: 55%, B: 52%, C: 48%, D: 51%

- Final Autocall Trigger: 60%

- Outcome: No autocall. Product reaches maturity.

- Worst-performing stock (C) is below 50%.

- You receive 48% of initial investment (matching the worst performer).

### Scenario 6: Missed Coupons with Recovery

- Quarter 5: Worst stock at 45% - No coupon, no autocall

- Quarter 6: Worst stock at 48% - No coupon, no autocall

- Quarter 7: All stocks above 85% - Autocall triggers

- Outcome: You receive 100% of initial investment plus 3 coupons (current + 2 memory)

## Key Considerations

1. Increased Autocall Probability:

- As the autocall trigger steps down, the chance of early redemption increases.

- This can be beneficial in sideways or slightly declining markets.

2. Potential for Earlier Exit:

- You might exit the investment earlier than in a standard autocall product.

- This could be advantageous if market conditions are expected to worsen.

3. Coupon Payments:

- Coupon payments are still subject to the 50% barrier, regardless of the autocall trigger.

- You can receive coupons even if the autocall doesn't trigger.

4. Risk at Maturity:

- Despite the step-down feature, if no autocall occurs, your capital is still at risk if any stock is below 50% at maturity.

5. Opportunity Cost:

- Early autocall might mean missing out on potential gains if stocks perform well later in the product's life.

## Interactive Learning

Consider these questions based on your chosen stocks and coupon rate:

1. "If your worst-performing stock is at 82% in Quarter 7 (Month 21), would the product autocall?"

2. "How does the step-down feature affect your chances of receiving your investment back compared to a product with a fixed 100% autocall level?"

3. "If the product autocalls in Quarter 10, how many coupons would you have received in total?"

Feel free to ask about any specific scenarios you're curious about, using your chosen stocks and coupon rate!