



# Predictive Relationship: Difference Regression

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# 1 Trading Strategy Description

This trading rule regresses the 1-day price changes seen historical against the prior day's % change of the research series.

## 2 Rule Parameters

Below is a table summarizing the parameters specific to this trading rule.

Parameter Name	Default Value	Description	Symbol
Difference Coefficient	0.1	Multiplier for regression.	$k_1$
Constant Coefficient	0.1	Initial constant for regression.	$k_2$

## 3 Equation

Below is the equation which governs how this specific trading rule calculates a trading position.

$$z_t = k_1 * \left( \frac{R_t}{P_{t-1}} - 1 \right) + k_2 \quad (1)$$

where:

- $z_t$  is the portfolio allocation at time  $t$
- $R_t$ : Research value at time  $t$
- $P_{t-1}$ : Price value at time  $t - 1$
- $k_1$ : Difference coefficient
- $k_2$ : Constant coefficient

## 4 Glossary

- **Bullish:** Positive outlook on the market. Expectation of positive returns.
- **Bearish:** Negative outlook on the market. Expectation of negative returns.
- **Allocation:** The allocation is the fractional amount of the portfolios value used to determine the size of the trading position.
- **Parameter:** Value used by the trading rule in the calculation for trading position
- **Trading Rule:** Strategy to determine when to buy, hold or sell a position.

## Further Links

1. InferTrade: <https://www.infertrade.com>
2. Privacy Policy/Legal notice: <https://www.infertrade.com/privacy-policy>
3. InferStat Ltd: <https://www.inferstat.com>