# ANNUAL RETURNS

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#### **ANNUAL SPY RETURNS**

SPY = S&P 500 Exchange Traded Fund (ETF)

### **COMPOUNDED SPY RETURNS**

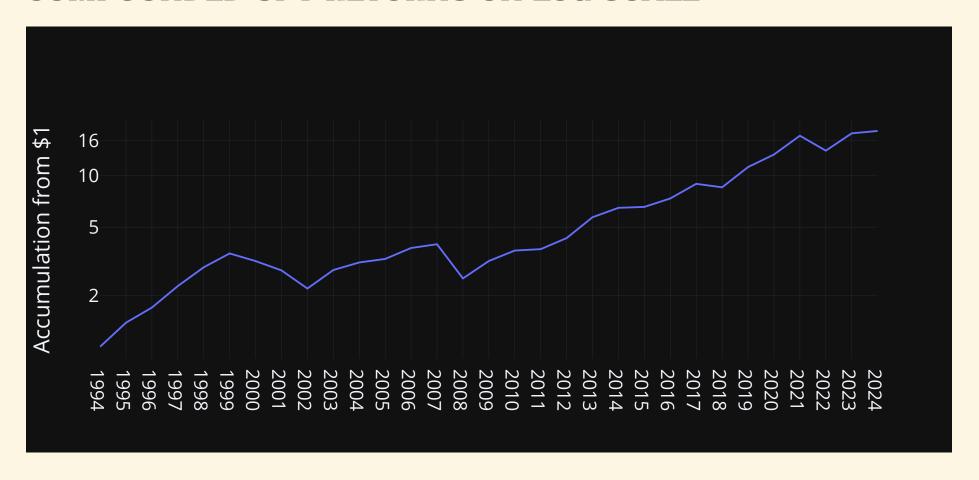
#### COMPOUNDED RETURNS ON LOG SCALE: MOTIVATION

## PLOT OF THE EXAMPLE

# LOG (BASE 10) OF ACCUMULATION

# MAP y TICK LABELS TO DOLLARS

### COMPOUNDED SPY RETURNS ON LOG SCALE



value of \$1 investment with dividends reinvested

# **BOX PLOT**

#### **BOX AND DENSITY PLOTS OF ANNUAL SPY RETURNS**



Box plot

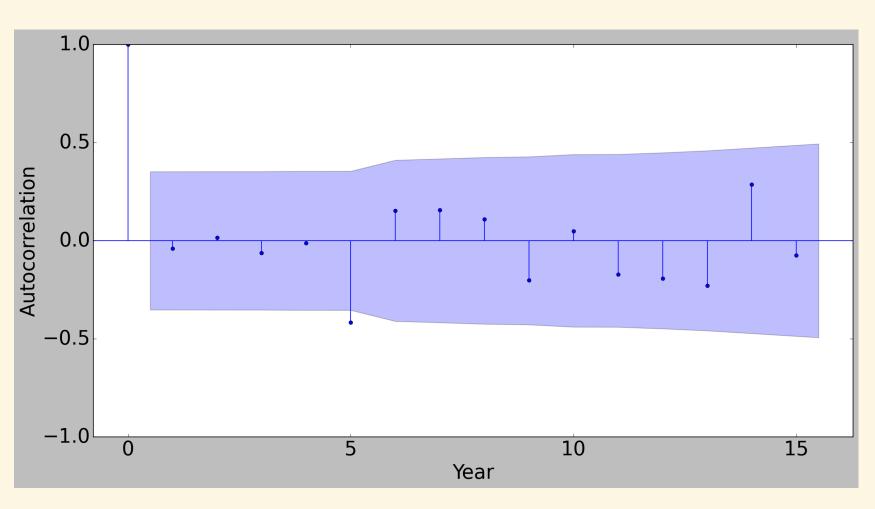
Density plot



### **AUTOCORRELATIONS**

#### **AUTOCORRELATIONS OF ANNUAL SPY RETURNS**

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#### DOES LAST YEAR'S RETURN PREDICT THIS YEAR'S?