

# **SMART BETA V.S. MACHINE LEARNING**

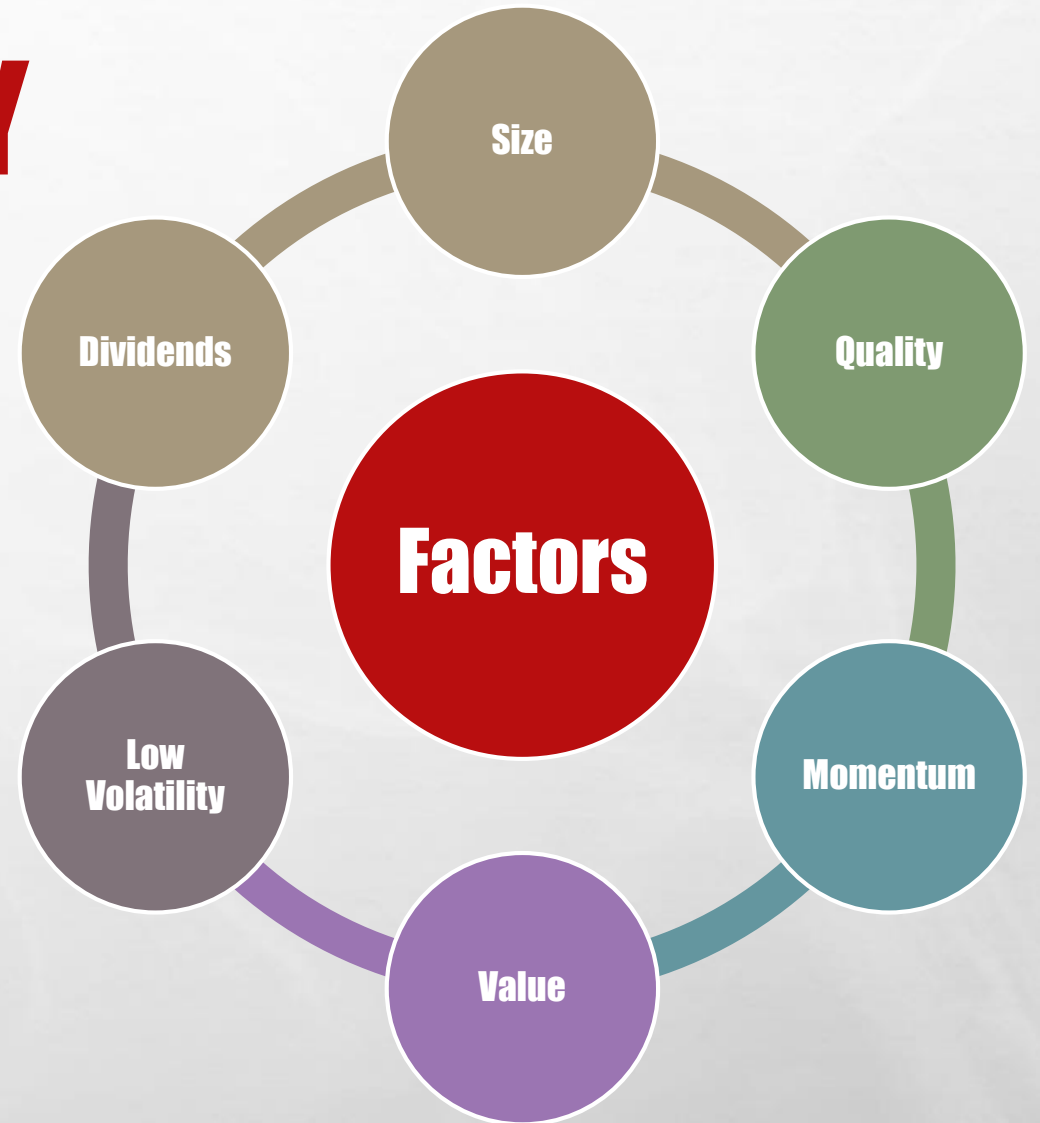
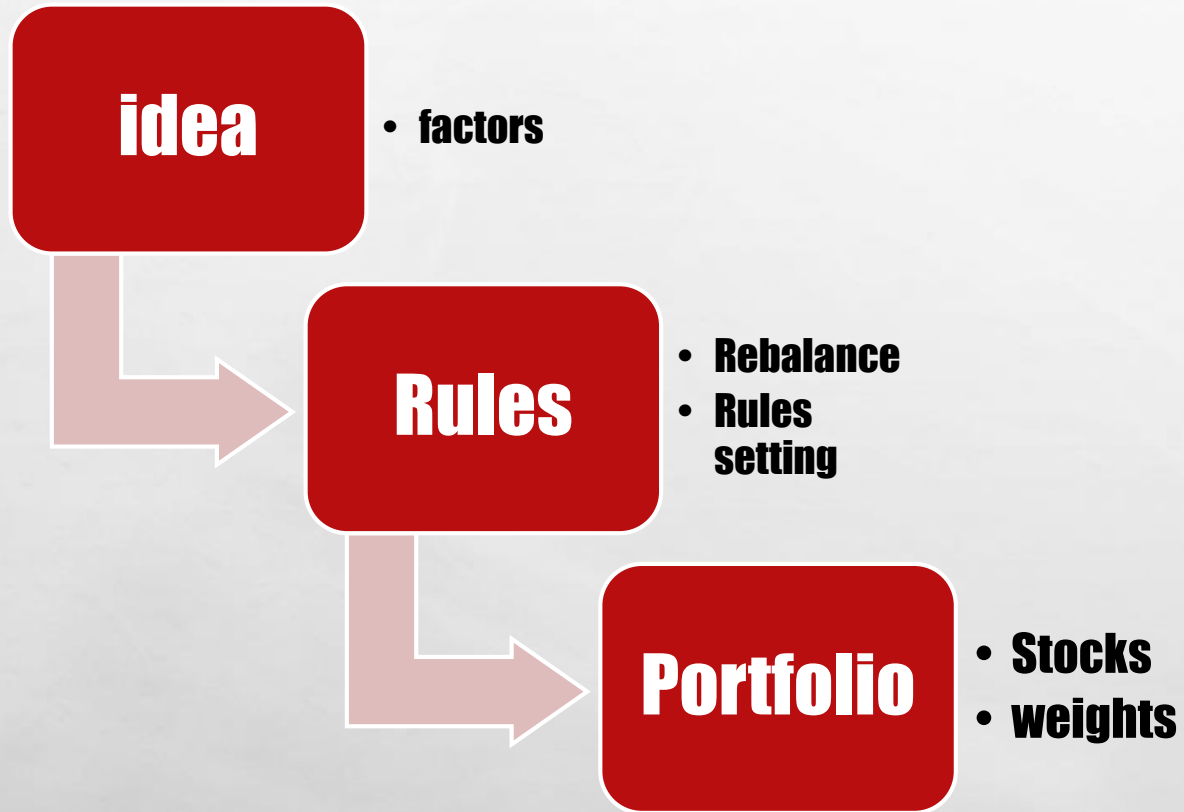
**PYINVEST**



# WHAT IS A PORTFOLIO?



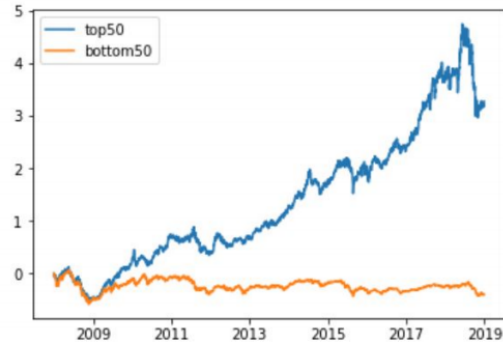
# SMART BETA STRATEGY



# MOMENTUM STRATEGY IN TAIWAN

Empirical Results of Risk-adjusted Price Momentum Portfolios

| top50 portfolio        | Quarterly | Semiannually | Annually |
|------------------------|-----------|--------------|----------|
| Total Return (%)       | 327.96    | 335.33       | 92.75    |
| Annualized Return (%)  | 14.13     | 14.31        | 6.15     |
| Standard Deviation (%) | 18.29     | 17.66        | 17.26    |
| Sharpe Ratio (%)       | 77.25     | 81.04        | 35.61    |
| Bottom50 portfolio     | Quarterly | Semiannually | Annually |
| Total Return (%)       | -40.12    | -6.03        | -30.46   |
| Annualized Return (%)  | -4.56     | -0.56        | -3.25    |
| Standard Deviation (%) | 16.78     | 16.62        | 16.75    |
| Sharpe Ratio (%)       | -27.14    | -3.39        | -19.40   |



(i) Quarterly

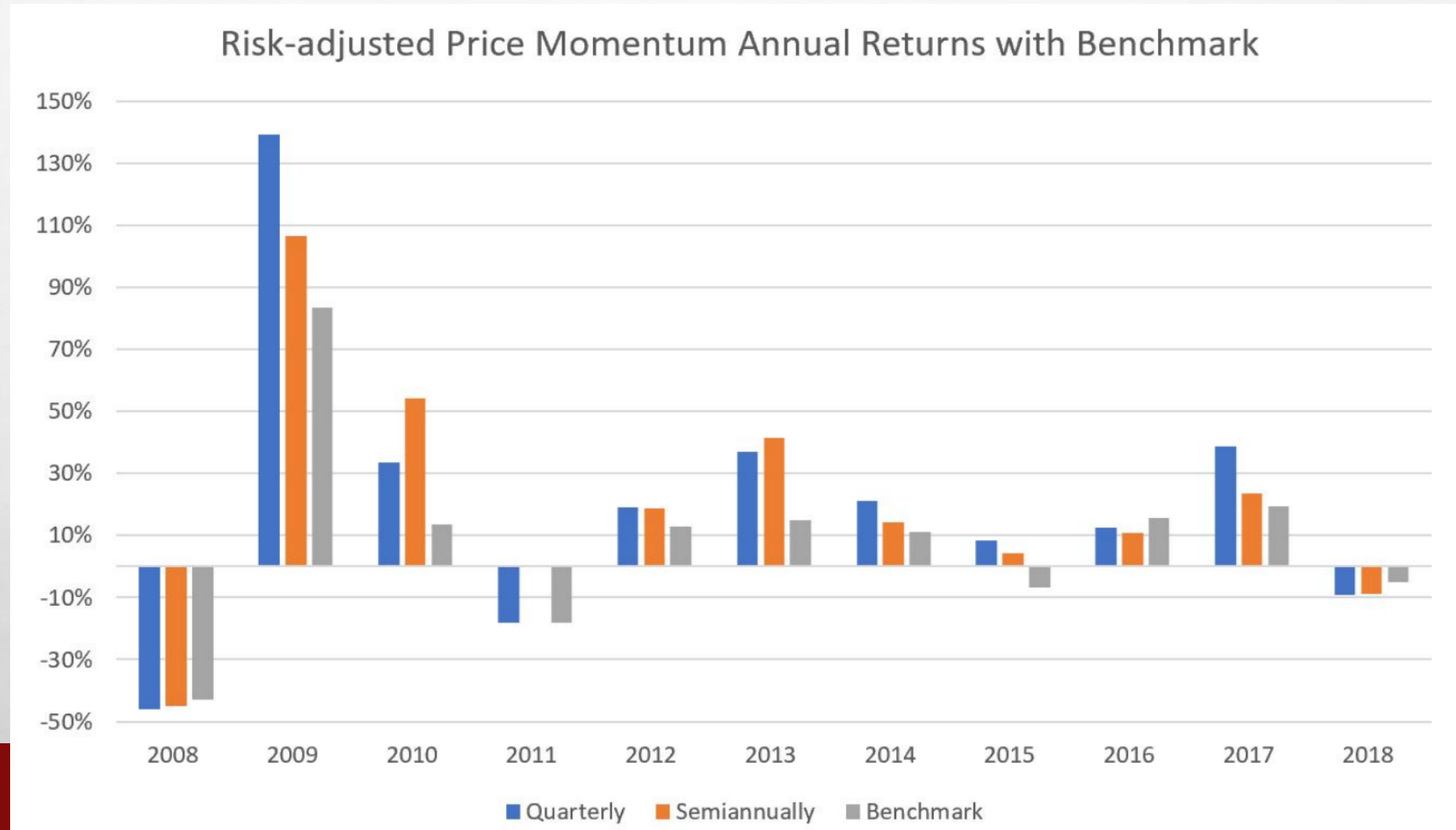


(ii) Semiannually



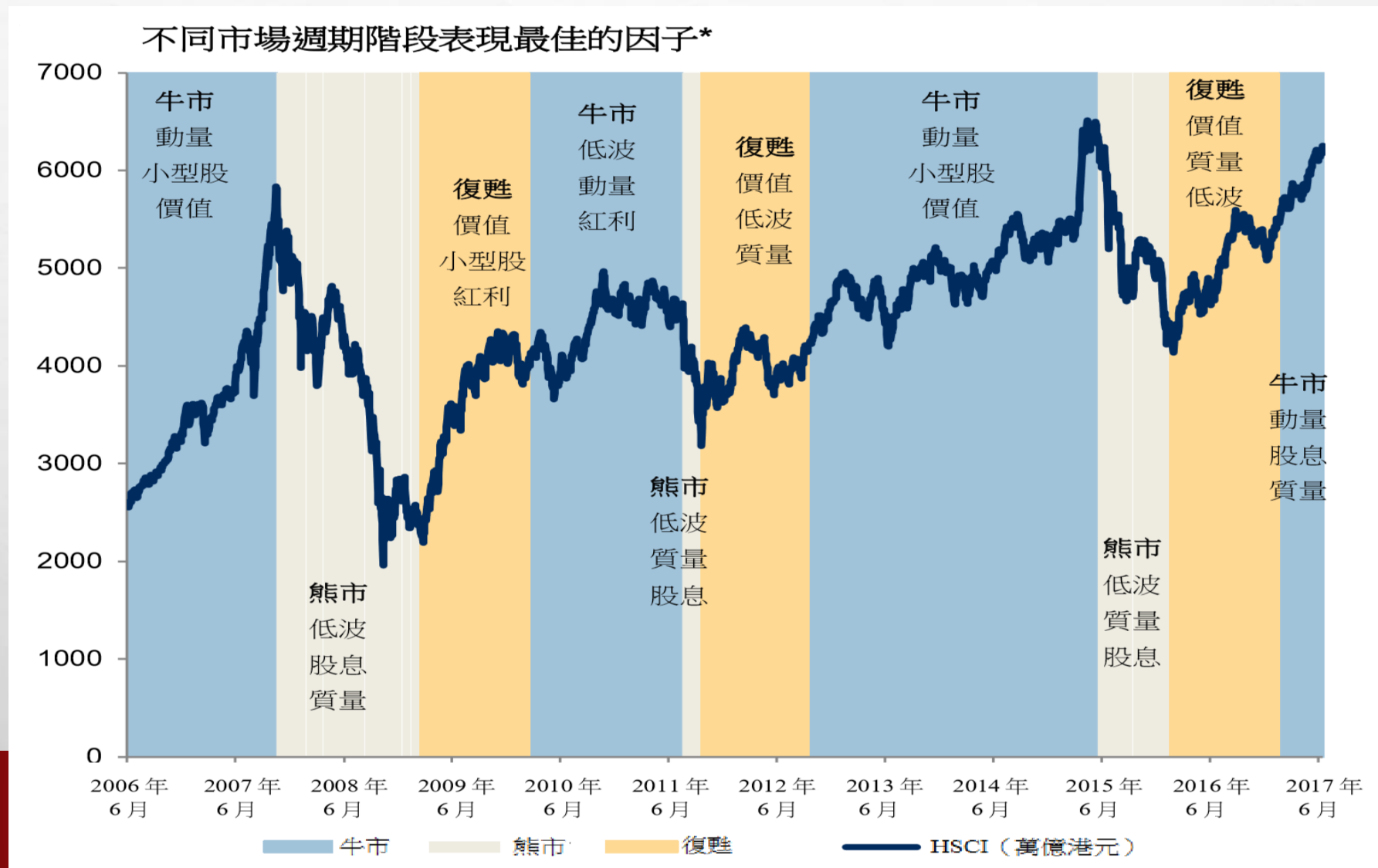
(iii) Annually

# MOMENTUM STRATEGY IN TAIWAN





# THE PERFORMANCE OF DIFFERENT FACTORS



Resource:  
S&P DJI

# MACHINE LEARNING STRATEGY



**Features**

**Modeling**

**Portfolio**



# SAME FEATURES WITH DIFFERENT MODELS





# CONCLUSION

**Smart  
Beta**

**Logic**

**Rules**

**Machine  
Learning**

**Features**

**Models**

# IF YOU WANT TO KNOW MORE...



- **BLOG:**  
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- **YOUTUBE:**  
[HTTPS://REURL.CC/ZG3GE](https://reurl.cc/zg3ge)