**Performance Measures**

Except *cumulative wealth*, we evaluate the performance of *APY(annualized percentage yield), WT(winning ratio), Sharpe ratio, MDD(maximum drawdown)* and *CR(Calmar ratio)* of the compared strategies and summarize results in the table.



From the results, we get some conclusions:

1. In experiment 1, RMR performs very well and achieves lower *MDD* and higher *CR* on most datasets(except MSCI).
2. RMR is able to reach a good trade-off between return and risk, even though we didn’t consider risk in our formulation.
3. In experiment 2-1, we got the similar conclusion in developed markets such as the U.S. and the U.K after we changed our datasets.
4. In experiment 2-2, we found two exceptions from our results. One is during the financial crisis and the other is in the emerging market. These results show that RMR has lower Sharpe Ratio and Calmar Ratio during financial crisis since it may be highly affected by the market performance.

In addition, to test whether simple luck can generate the return of the proposed strategy, we also conduct a statistical test to measure the probability of this situation, as is popularly done in the fund management industry. And we use regression to estimates the portfolio’s alpha, which indicates the performance of the investment after accounting for the involved risk. Then we conduct a statistical *t-test* to evaluate whether alpha is significantly different from 0. The smaller the probability, the higher confidence the trading strategy.



The statistical results confirmed our previous analysis and also show that the universality of RMR is still an open question.