International Journal of Finance & Economics / Volume 26, Issue 4 / pp. 5321-5336
RESEARCH ARTICLE

The profitability of Ichimoku Kinkohyo based trading rules in stock markets and FX markets

Shangkun Deng, Haoran Yu, Chenyang Wei, Tianxiang Yang, Shimada Tatsuro

First published: 13 August 2020
https://doi.org/10.1002/ijfe.2067

Funding information China Three Gorges University, Grant/Award Numbers: 20170907, KJ2016A001; Hubei Provincial Department of Education, Grant/Award Number: Q20171208

PDF

Abstract

This paper examines the profitability of trading rules based on a Japanese technical analysis method called Ichimoku Kinkohyo. First, the trading strategies based on several entry and exit strategies of Ichimoku Kinkohyo charting were designed. Then, we investigated their profitability on four stock indices of the world's famous stock exchanges over 1995 to 2018, and on four important currency pairs over 2003 to 2018. By using the default parameter setting (9, 26, 52) of Ichimoku Kinkohyo, we found that although several profitable trading strategies were obtained for stock index trading and currency trading during the Subperiod 1, experimental results in the Subperiod 2 revealed that they failed to create values consistently. Finally, evidence from parameter sweep showed that several Ichimoku trading strategies may well prove to be profitable on stock index trading, but none was found for currency trading.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available in Yahoo Finance website at [https://finance.yahoo.com/], and Stooq website at [https://stooq.com/q/]. These data were derived from the following resources available in the public domain: [https://finance.yahoo.com/] and [https://stooq.com/q/]

Chen, S., Bao, S., & Zhou, Y. (2016). The predictive power of Japanese candlestick charting in Chinese stock market. *Physica A: Statistical Mechanics and its Applications*, **457**, 148–165.

Web of Science® | Google Scholar

Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, **25**(2), 383–417.

Web of Science® | Google Scholar

Goo, Y., Chen, D., & Chang, Y. (2007). The application of Japanese candlestick trading strategies in Taiwan. *Investment Management and Financial Innovations*, **4**, 49–71.

Google Scholar

Hsu, P. H., Taylor, M. P., & Wang, Z. (2016). Technical trading: Is it still beating the foreign exchange market? *Journal of International Economics*, **102**, 188–208.

Web of Science® | Google Scholar

Johnson, N. J. (1978). Modified t tests and confidence intervals for asymmetrical populations. *Journal of the American Statistical Association*, **73**, 536–544.

Web of Science® | Google Scholar

Kamo, T., & Dagli, C. (2009). Hybrid approach to the Japanese candlestick method for financial forecasting. *Expert Systems with Applications*, **36**(3), 5023–5030.

Web of Science® | Google Scholar

Lu, T. H. (2014). The profitability of candlestick charting in the Taiwan stock market. *Pacific-Basin Finance Journal*, **26**, 65–78.

CAS | Web of Science® | Google Scholar

Murphy, J. J. (1999). *Technical analysis of the financial markets: A comprehensive guide to trading methods and applications* (2nd ed.). New York, NY: New York Institute of Finance.

Google Scholar

Nison, S. (1991). *Japanese candlestick charting techniques*. New York, NY: New York Institute of Finance.

Google Scholar

Nison, S. (1994). *Beyond candlesticks: New Japanese charting techniques revealed (Wiley finance)*, New York: Wiley.

Google Scholar

Oberlechner, T. (2010). Importance of technical and fundamental analysis in the European foreign exchange market. *International Journal of Finance & Economics*, **6**(1), 81–93.

Google Scholar

Park, C. H., & Irwin, S. H. (2004, October). *The profitability of technical analysis: A review*. AgMAS Project Research Report No. 2004-04.

Google Scholar

Patel, M. (2010). *Trading with Ichimoku clouds: The essential guide to Ichimoku Kinko Hyo technical analysis*, Hoboken, New Jersey: Wiley Trading.

Google Scholar

Rousis, P., & Papathanasiou, S. (2018). Is technical analysis profitable on Athens stock exchange? *Journal of Business Research*, **2018**(61), 24.

Google Scholar

Google Scholar

Urquhart, A., & Mcgroarty, F. (2016). Are stock markets really efficient? Evidence of the adaptive market hypothesis. *International Review of Financial Analysis*, **47**, 39–49.

Web of Science® | Google Scholar

Zakamulin, V. (2014). The real-life performance of market timing with moving average and time-series momentum rules. *Journal of Asset Management*, **15**, 261–278.

Google Scholar

Citing Literature