Journal of
Business and Strategic Management
(JBSM)

Testing and Overview Not-Held Trading Strategy

Journal of Business and Strategic Management

ISSN 2520-0402 (online)

Vol. 10, Issue No. 15, pp. 36 - 46, 2025 www.carijournals.org

Testing and Overview Not-Held Trading Strategy

Bhupinder Paul Singh Sahni

https://orcid.org/0009-0007-8047-348X

Accepted:24th November 2025 Received in Revised Form:5th December 2025 Published: 12th December 2025

Abstract

In today's complex financial trading environment, understanding advanced order types and algorithms is critical to achieving optimal execution and taking advantage of ever evolving market dynamics. Among various algorithms and order types supported in the financial trading world, Not-Held Orders grants traders discretionary control over execution, timing and price. This white paper presents comprehensive exploration of the Not-Held Orders used in the financial trading world. It provides a detailed definition of Not-Held orders, explores real-world market scenarios demonstrating their practical use, and discusses testing strategies employed to evaluate their performance and reliability. Furthermore, the article highlights the role of software quality assurance (SQA) in validating system functionality, ensuring that Not-Held order workflows operate accurately and efficiently within electronic trading platforms.

Keywords: Not-Held Order, Algorithmic Trading, Trading Strategy, Testing, Quality Assurance, VWAP, TWAP, Investment Banking.

Journal of Business and Strategic Management
ISSN 2520-0402 (online)
Vol. 10, Issue No. 15, pp. 36 - 46, 2025
www.carijournals.org

Introduction

The trading landscape has changed dramatically over last couple of decades from trading execution relied solely on traders screaming across the exchange or calling the broker by phone back in the 90s, to what is called algorithmic trading in the current time. Today, traders use automated, pre-defined systems called algorithms to execute trades. Algorithms or Algos break large orders into smaller pieces, time the placement of orders into market and adapt to liquidity at real time. Algorithmic trading ensures a system, which is based on rules in order to optimize capital use and position, manage possible risks, and trading instruments and detect trading opportunities. Most of the time entries and exits are carried out by algorithms as well. All this is possible as systems are all automated [1]. Algorithmic Trading has become central force across asset classes like Equities, Foreign Exchange (FX) and Fixed Income. Algorithmic Trading aims to optimize trading execution.

But while Algorithmic Trading automates trading execution, not every Order can be handled in a specific rigid manner. Traders frequently require flexibility and discretion to determine optimal timing for order placement, as well as to select appropriate trading strategies according to prevailing market conditions [2]. The Strategy adopted by Traders or Dealers in these scenarios is termed as Not Held Order. A Not-Held order gives a broker the time and price discretion to seek the best price available. The broker is not held responsible for any potential losses or missed opportunities that result from their best effort [3]. This approach can be particularly useful when trading large orders or in illiquid markets, where the broker's expertise and ability to navigate market conditions can help achieve a more favorable outcome for the client [4].

This white paper will define Not-Held Order, explore real market scenarios where Not-Held Orders are commonly used. It also outlines different types of Not-Held Orders, examines the testing strategies applied to evaluate performance and effectiveness across different trading conditions.

Overview on Not-Held Orders and Its Application in Real World

A Not-Held Order is a type of trading instruction that gives Broker or trader full discretion over how and when to execute the order. In effect, the broker is not held responsible for executing the order right away or at a specific price [5]. This discretion can become extremely beneficial for traders, particularly in volatile markets, large-volume trades, or situations where the trader prioritizes optimal execution over speed [6]. While Not-Held Orders provide flexibility and potential execution advantages, it also carries execution risk, relying heavily on trader judgment, and require rigorous audit trails and regulatory compliance to ensure transparency and adherence to best execution standards.

Below are some of the scenarios where Not-Held Orders are applied in real world [7]:

Scenario 1: Large Block Trade by Institutional Investor. A Hedge Fund Company wants to sell 2 million shares of AAPL without affecting the market price.

Broker receives Not-Held Order from Client to buy large block trade on AAPL Stock. Broker uses its discretion and breaks the Order into smaller lots over a period of time, like Selling 50,000 stocks of AAPL at a time across multiple trading venues to minimize market impact. This helps client avoid sudden price drop because of large immediate sales of 2 million shares [8].

Scenario 2: Trading Illiquid Securities. An Asset Manager wants to Sell 100,000 shares of an Illiquid Security which does not have enough Buyers.

Illiquid Securities are the Securities which are difficult to sell quickly because of lack of market demand on the security. Selling 100,000 shares could bring the price down drastically for the illiquid Security. Broker uses discretion to wait for liquidity and does partial selling at a time when market becomes favorable for the Security. Client secures a better price on the Illiquid security [9].

Scenario 3: Trading in Volatile Markets. A Hedge Fund Company wants to buy shares of a healthcare stock in a volatile market.

During a volatile market, Not-Held Order allows the broker to wait until the volatility stabilizes. Broker discretion ensures that trade execution to buy the healthcare stock occurs at better prices rather than at the immediate market peak in a volatile market.

Brokers can use customized trading strategies to execute a Not-Held Order. It combines Broker's judgment with algorithmic efficiency, optimizing trade execution while controlling risk. Not-Held Orders are effectively used where trade execution discretion is required in case of volatile markets, large block orders or in the case of illiquid securities

Difference between Not-Held Order and Held Order

The basic difference between a Not-Held Order and Held Order is that Customer gives the broker discretion to use Broker's judgement to take the best call for Price and time of execution, but in Held Order Customer instructs the Broker to execute at a particular Price and time [10]. No discretion is provided in Held Orders.

Impact on Execution Quality, Market Conditions and Liquidity considerations [11]:

- Execution Quality: Not-Held Orders can achieve a better average price over time because the broker can wait for favorable market movements or split the order into smaller blocks. Held Orders are focused on speed over Price optimization. The Order is executed immediately or on the Price instructed by the Customer to Broker, so the average Price might be less favorable if the market is volatile.
- Market Impact: Not-Held Orders typically reduces price impact, as the broker can avoid large single trades that move the market. Held Orders can temporarily move Prices, especially for large Orders, because execution happens at current market price, regardless of market depth

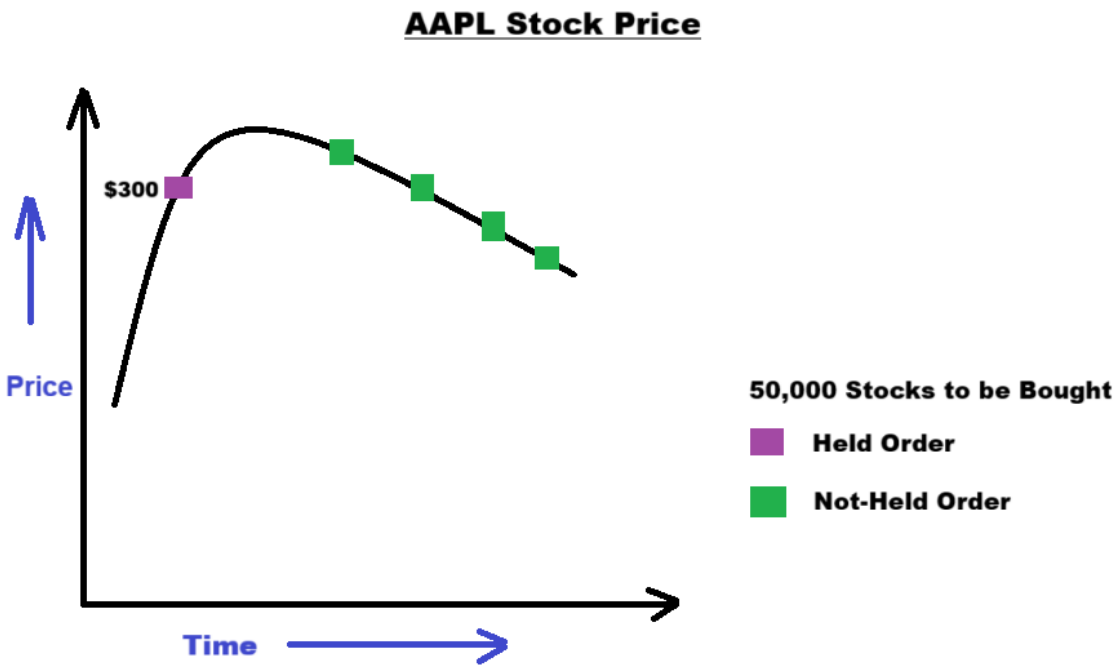
- Liquidity Considerations: For Not Held Orders, Broker can target times of higher liquidity to ensure smoother execution. In Held Orders, immediate execution may encounter limited liquidity, potentially causing partial fills or unfavorable price levels.

Below example illustrates how Not-Held Orders differ from Held Orders.

Example: Customer wants to Buy 50,000 Shares of Apple (AAPL) through Broker:

Held Order: Customer instructs Broker to Buy 50,000 Shares of Apple (AAPL) at $300. If AAPL Market Price is already $300, then AAPL Stocks will be bought at Price $300. If AAPL Stock is trading greater than $300, then Broker put in a Limit Order of $300, so whenever AAPL Stock comes back at $300 or less then AAPL Stock will be bought. Customer provides clear instructions of what Price AAPL Stock needs to be bought at in this scenario.

Not-Held Order: Customer advice Broker to Buy 50,000 Shares of Apple (AAPL) at best possible Price throughout the day. Customer gives Broker the discretion of choosing the Price and time during the day. This is often used for large and sensitive Orders, where discretion helps achieve better average Price and minimize market impact. Broker is not held responsible for missing a specific Price if discretion was used reasonably well by the Broker. Broker can use his discretion to divide the order as Iceberg Order [12] or other Order types depending on the market conditions.



Graph 1: AAPL Stock Price

Graph 1 shows AAPL Stock bought at $300 using Held Order, as instructed by the Customer. But using Not-Held Order, Broker uses its discretion, and Stock is bought in portions with a risk of

buying Stock above $300, but the average Price for the total number of Stocks bought can come out to be less than $300.

Advantages and Limitations of Not-Held Orders

Understanding the advantages and limitations of Not-Held orders is essential, as their discretionary nature affects execution quality, risk, and regulatory oversight. This section outlines the key benefits Not-Held Orders offer for flexible and strategic trading, as well as the limitations and challenges they introduce. By examining both sides, firms can determine when Not-Held orders are appropriate and how to manage them responsibly. Table 1 provides advantages and limitations of using Not-Held Orders [13]:

Table 1: Not-Held Orders Advantages and Limitations

S.No.	Not-Held Orders	Advantages	Limitations
1	Broker/ Trader Discretion for Best Execution	Not-Held Orders allow traders to choose best timing and price for execution. Broker's discretion can help capture price movements, execute in favorable market conditions	Not-Held Orders have Broker's discretion, so clients may experience slower execution. Not-Held Orders are not instantly executable
2	Voltile Markets	Not-Held Orders provide flexibility to traders in volatile markets. It gives more control to broker and smarter execution during unstable market conditions	Not-Held Orders do not promise best available price at the moment of entry; Execution may happen at a worse price than the current market, specially in the cases of volatile markets
3	Market Impact	Brokers have the choice of when and how to execute Not-Held Orders, so they can break large Orders into smaller pieces and minimize adverse price movement	In order to avoid market impact and break large orders into smaller pieces may have liquidity disappear and Not-Held Orders not getting filled fully
4	Handling Large, Complex Orders	Not-Held Orders offer the flexibility needed for large block orders and for illiquid securities	Handling large and complex orders depend on Broker's skill and judgement. Poor judgement can lead to orders not getting filled
5	Access to Advance Trading Strategies	Not-Held Orders provide Broker more options and discretionary power to use various algorithmic trading strategies based on market conditions	Access to advance Trading strategies and Broker's discretionary power leads to increased regulatory scrutiny. Firms face higher compliance and regulatory risks

Testing Not-Held Orders

Given the discretionary nature of Not-Held Orders, it is important to ensure Not-Held Orders function as per business requirements in production trading environment. This demands a structured and comprehensive testing and quality assurance framework. The goal of such testing is to validate

that Not-Held order workflows execute according to design specifications while maintaining system reliability, compliance, and performance integrity under variable market conditions.

Benefits of having Software Quality Assurance Framework and Testing Not Held Orders [14]:

- Execution Accuracy - If the system misinterprets the instructions, orders may execute at wrong prices or quantities, causing issues for clients and the firm. Testing ensures partial fills, delayed executions and price optimizations work correctly according to business rules specified by the Broker. Poor execution can cause significant market impact, moving prices unfavorably causing financial and reputational losses to the firm and the broker. Pre-production testing helps verify that the system splits orders appropriately, handles volatility, and avoids unintended market disturbances.
- Regulatory Compliance - Testing Not Held orders ensures that every action is logged accurately and that discretionary execution still meets regulatory obligations. Testing prevents non-compliance penalties due to execution errors or missing records.
- System Stability and Performance – Testing prevents latency issues or system failures due to high volume and stress conditions.
- Financial and Operation Stability – Testing ensures that Not Held Order logic, execution, reporting and risk controls are fully validated before Not Held Orders are traded in Production, thereby reducing financial and Operational Risk. Testing also ensures Client relies on Broker Trading system for accurate and efficient results.

Below multi-layered Software Testing and Quality Assurance approach should be implemented to ensure Not-Held Orders operate reliably and in accordance with technical and business specifications

Functional Testing: Functional Testing ensures Not-Held Order functionality works as per business specifications, handling instructions, routing logic and output associated with discretionary execution. Functional Testing verifies that trading system correctly interprets and stores Not-Held Order attributes like Price, Quantity, Execution Time, etc. Invalid Order type or missing mandatory fields are rejected with appropriate errors. Not-Held Orders should be able to partially or fully execute on broker discretion. Orders can be canceled or modified as per broker's discretion. Since Not-Held Orders involve discretionary decisions, functional tests must ensure proper timestamp is recorded for all events, handling instruction fields are logged properly, all lifecyscle events appear in the audit trail, etc. Not-Held Orders are unique, discretionary and regulated, therefore, functional testing is critical to ensure safe and compliant trading behavior.

Integration Testing: Integration testing ensures all components in the trading system work together when processing Not-Held orders. Integration Testing ensures order flows correctly from front end applications to Order Management Systems and other systems feeding from and into Front end trading application through Not-Held Orders. The Testing ensures all components in the trading

system work together when processing Not-Held orders. Figure 1 below illustrates Integration Testing or End-to-End Testing done for the Trade generated through Not-Held Orders.

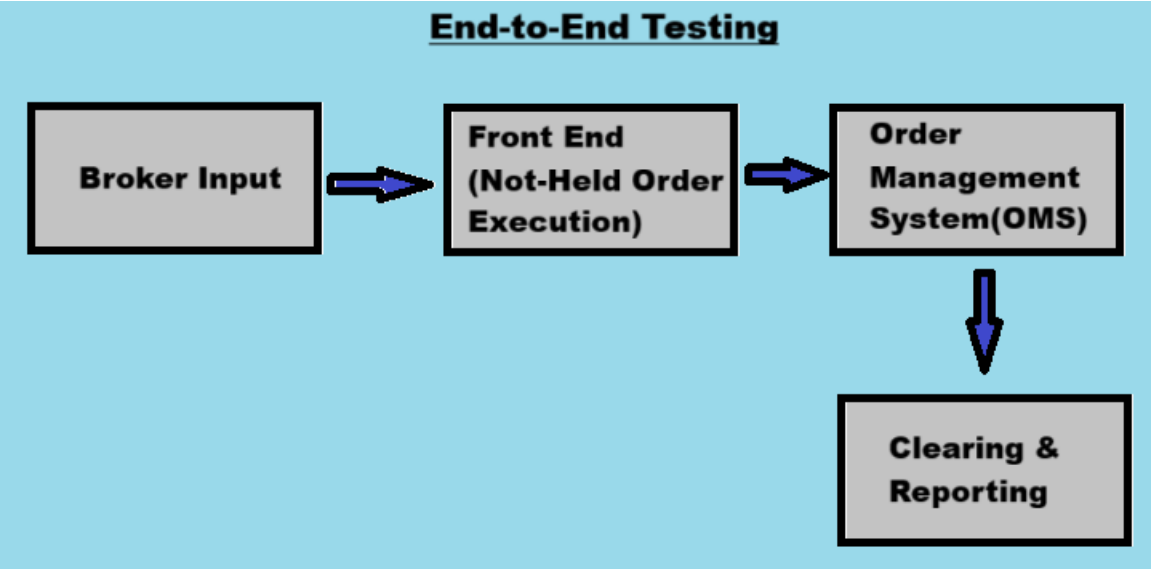


Figure 1: End-to-End Testing for Not-Held Order Execution

Performance Testing: Performance Testing ensures working of Not-Held Orders remain efficient and correct even during peak trading volumes. During peak trading volumes, trading systems need to measure, process and optimize Trading Orders within seconds. Trading systems need to handle enormous volumes of market data and transactions. Performance tests must simulate real-world data volumes accurately [15]. This is to ensure Not-Held Orders performs Order Execution as per Broker's discretion and based on market movement. Performance Testing must ensure consistent behavior under various market conditions. Figure 2 below shows Performance Testing workflow for testing Not-Held Orders in Trading Application.

Journal of Business and Strategic Management
ISSN 2520-0402 (online)
Vol. 10, Issue No. 15, pp. 36 - 46, 2025

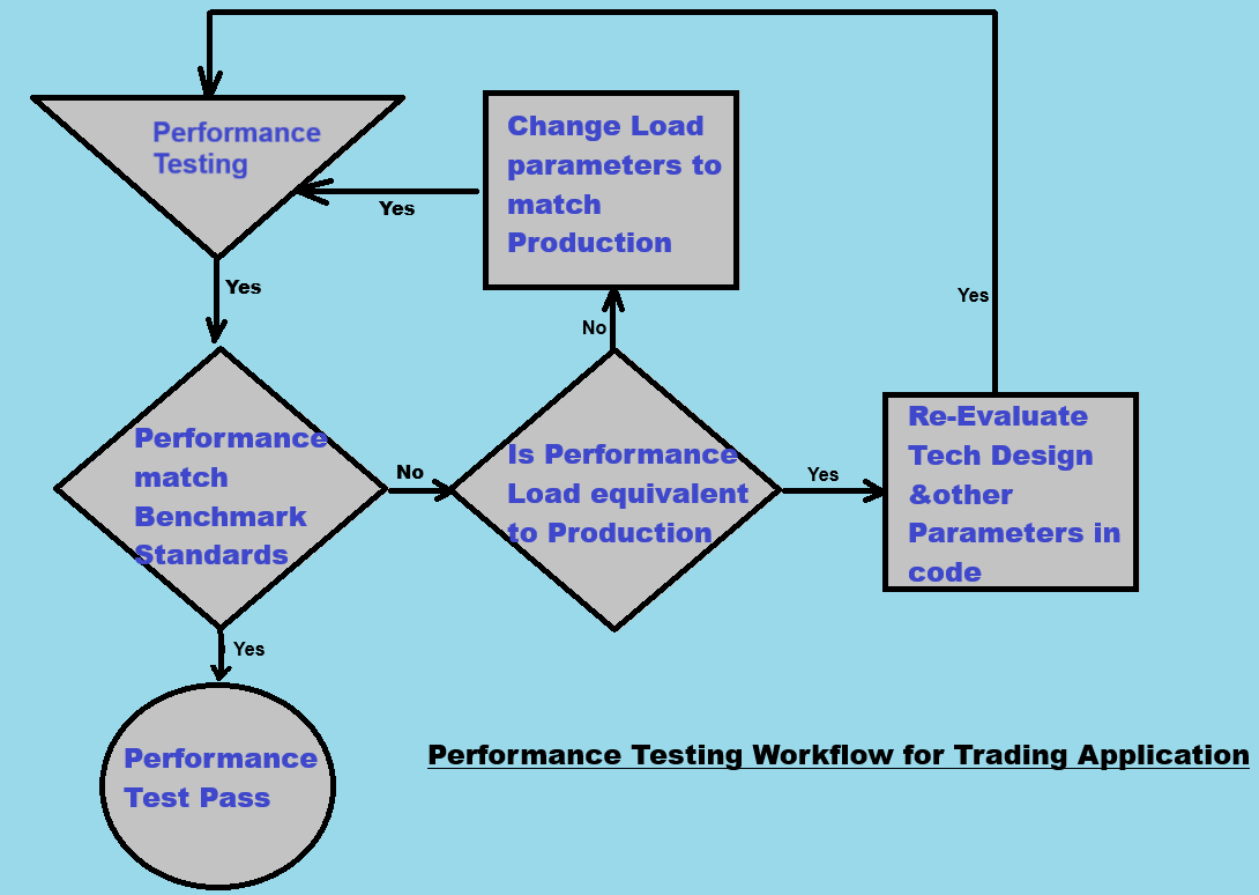


Figure 2: Performance Testing Workflow for Trading Application

Stress Testing: Stress testing is a critical process for evaluating how trading strategies perform under extreme market conditions, like financial crises or high volatility periods. It focuses on rare events, helping traders identify risks, protect portfolios, and prepare for crises [16]. This Testing is particularly important for algorithmic and high-frequency trading platforms where timing precision directly impacts execution outcomes, like in the case of Not-Held Orders where Broker needs to time the market to get the best outcome for its clients.

Regression and Automation Testing: Regression testing is a type of software testing that ensures changes made to the software on adding new features or functionalities has not adversely impacted existing functionality and it still works correctly [17]. Regression Testing is critical after Testing Not-Held Orders. Not-Held Orders affect multiple parts of a Trading System, even small changes in the functionality can unintentionally break other processes, order types, routing logic, compliance processes, etc. Regression Testing is to ensure that functional changes in Not-Held Orders are not impacting other trade flows supported by Order Management System. Since Regression Testing is done after any changes in functionality, it is prudent that Regression Testing is Automated.

Automated Testing ensures Tests are run automatically and periodically after any change in functionality. Automaton Testing of Regression Tests ensures system stability across complex interactions within the trading system, early bug finding in software development cycle, prevents risky production issues and reduces manual testing effort. Automation Testing also gives leverage to simulate large batches of Not-Held Orders; testers can simulate a mix of Not-Held alongwith other algorithmic trading orders and see the impact on the system. Overall Automation Testing reduces the overall risk and improves quality of trading system, while implementing Not-Held Orders [18].

Compliance and Regulatory Testing: Regulatory compliance testing in financial trading is the systematic process through which firms evaluate, monitor, and document their adherence to rules and standards set by authorities such as FINRA and MiFID II [19]. Not-Held Orders are high-risk trading orders because they give the broker discretion in trade execution. This makes Not-Held Orders subject to strict compliance and regulatory requirements like best execution obligations, FINRA, MIFID Regulatory requirements, etc. Some of the tests to ensure Not-Held Orders meet compliance and regulatory requirements include tagging Not-Held Orders in FIX Protocol (Financial Information eXchange), Order Management System (OMS) and Reporting Systems. Proper Regulatory and Compliance Testing of Not-Held Orders ensures firm remains compliant, transparent and protected of legal issues.

Conclusion

In financial markets, the execution of trades is often guided by different types of orders, each serving a specific strategic purpose. Unlike standard orders, which are executed at predetermined price or within strict conditions, Not-Held orders provide flexibility, allowing professionals to respond dynamically to market conditions. Understanding when and why Not-Held Orders should be exercised is crucial for leveraging their full potential in achieving favorable trading outcomes. It is a strategic tool for traders and brokers, offering flexibility to optimize trade execution in dynamic market conditions. Since Not-Held orders grant discretion over timing and price, testing their effectiveness becomes essential to ensure they achieve the intended trading objectives.

Recommendations

Traders can carefully evaluate how Not-Held orders perform under different market conditions. Traders and brokers can optimize execution, minimize risks, and make informed decisions rather than relying on assumptions. By combining flexibility of Not-Held Order with rigorous testing, traders can fully leverage Not-Held orders to achieve more effective and informed trading outcomes.

References

[1] Massei, Giulia. "Algorithmic trading: An overview and evaluation of its impact on financial markets." (2023).

[2] CFI Team. "Not-Held Order", corporatefinanceinstitute.com. Available at: https://corporatefinanceinstitute.com/resources/career-map/sell-side/capital-markets/not-held-order/

[3] Akhilesh Ganti. "Not-Held Order: Types, Benefits and Limitations", investopedia.com. Available at: https://www.investopedia.com/terms/n/notheldorder.asp

[4] CFI Team. "Not-Held Order" corporatefinanceinstitute.com. Available at: https://corporatefinanceinstitute.com/resources/career-map/sell-side/capital-markets/not-held-order/?utm_source=google&utm_medium=cpc&utm_term=&utm_content=&utm_campaign=&utm_adgroup=&utm_funnel=&gad_source=1&gclid=Cj0KCQjwjLGyBhCYARIsAPqTz1_bQpheyEDuRmai14JkJS_yTHg8hmiu5N-w1_1Og5U0yz9jc_U1eSwaAim0EALw_wcB

[5] "Not Held Order (NH) Meaning & Definition", securitiesce.com. Available at: https://securitiesce.com/definitions/5924-not-held-order-nh/?srsltid=AfmBOookiXd-SCRLc9qIPOgetc1Y9Wh8d_cw2Nilosle6dXBQScD1cAl

[6] Bhupinder Paul Singh Sahni (2023) Introduction to Algorithmic Trading Strategies. Journal of Mathematical & Computer Applications. SRC/JMCA-196

[7] Tyler Corvin. "Not Held Orders - Your 2025 Guide to Smart Trading", thetradinganalyst.com. Available at: https://thetradinganalyst.com/not-held-order/

[8] James Chen. "Block Trade Explained: Definition, Process, and Market Impact", investopedia.com. Available at: https://www.investopedia.com/terms/b/blocktrade.asp#:~:text=Suppose%20an%20investor%20places%20a,lead%20to%20significant%20price%20shifts.

[9] Christina Majaski. "Understanding Illiquid Assets: Risks, Examples, and Market Impact", investopedia.com. Available at: https://www.investopedia.com/terms/i/illiquid.asp

[10] Adam Hayes. "Held Order: What it Means, How it Works, Uses", investopedia.com. Available at: https://www.investopedia.com/terms/h/held-order.asp

[11] Handa, Puneet and Schwartz, Robert A. and Tiwari, Ashish, Not Held Orders: Evidence on the Value of Order Timing in an Equity Market (August 2000). Available at SSRN: https://ssrn.com/abstract=242018 or http://dx.doi.org/10.2139/ssrn.242018

[12] Sahni, Bhupinder Paul Singh. "Understanding and Testing Iceberg Algorithmic Trading Strategy." Journal of Business and Strategic Management 9.4 (2024): 40-49.

[13] "Not held order", diversification.com. Available at: https://diversification.com/term/not-held-order

[14] Bhupinder Paul Singh Sahni. (2024). Quality Assurance on Algorithmic Trading Strategies. Journal of Scientific and Engineering Research, 11(1), 286–289. https://doi.org/10.5281/zenodo.12772054

[15] Dominic Tovey. "Performance testing for high-frequency trading systems: Ensuring speed and reliability in financial markets", assuredthought.com. Available at: https://assuredthought.com/insight/legacy-system-modernisation-in-traditional-banks-a-path-to-digital-excellence_2

[16] Sean Mackey. "Stress Testing for Trading Strategies", luxalgo.com. Available at: https://www.luxalgo.com/blog/stress-testing-for-trading-strategies-2/

[17] W. E. Wong, J. R. Horgan, S. London and H. Agrawal, "A study of effective regression testing in practice," Proceedings The Eighth International Symposium on Software Reliability Engineering, Albuquerque, NM, USA, 1997, pp. 264-274, doi: 10.1109/ISSRE.1997.630875.

[18] Anika Chakraborty. "Comprehensive Strategies to Test Trading Software", codoid.com. Available at: https://codoid.com/automation-testing/comprehensive-strategies-to-test-trading-software/

[19] "What is Regulatory Compliance?", metricstream.com. Available at: https://www.metricstream.com/learn/comprehensive-guide-to-regulatory-compliance.htm#:~:text=Regulatory%20compliance%20is%20important%20to,Important%20benefits%20include