# The Feasibility of Trading Binary Options on Alternative Trading Systems (ATS)

## 1. Executive Summary

This report addresses the question of whether binary options can be traded on Alternative Trading Systems (ATS). Binary options are financial contracts characterized by a simple yes/no proposition regarding an underlying asset's price movement relative to a specific level at a predetermined time, resulting in a fixed payout or the complete loss of the investment. They are widely considered high-risk, speculative instruments and have been frequently associated with fraudulent activities, particularly on unregulated online platforms. Alternative Trading Systems (ATS) are U.S. Securities and Exchange Commission (SEC)-regulated trading venues, typically registered as broker-dealers, that electronically match buy and sell orders for *securities*. They function as an alternative to national securities exchanges but operate under a distinct, generally less stringent regulatory framework (Regulation ATS), often characterized by lower pre-trade transparency (e.g., "dark pools").

The regulatory environment for binary options is notably strict in major financial jurisdictions. In the European Union, the marketing, distribution, and sale of binary options to retail clients are prohibited. In the United States, jurisdiction is divided: binary options based on commodities or certain events fall under the Commodity Futures Trading Commission (CFTC) and must legally trade only on CFTC-regulated Designated Contract Markets (DCMs), while those based on securities could theoretically fall under SEC oversight, requiring registration or exemption. However, the predominant legal venues for binary options and similar "event contracts" in the U.S. are a small number of specialized CFTC-regulated exchanges.

Based on analysis of the regulatory frameworks, instrument classifications, and market practices, this report concludes that binary options are generally **not** traded on ATS platforms. The primary reasons include a fundamental regulatory mismatch (ATS are SEC-regulated for securities, while most binary options are CFTC-regulated or banned), instrument classification issues (most binary options do not meet the definition of "securities" under Regulation ATS), the explicit designation of DCMs as the sole legal venues for CFTC-regulated binary options in the US, and potential operational incompatibilities. ATS platforms are designed and regulated for securities trading under SEC Regulation ATS, a framework that does not typically encompass binary options as they are currently defined and regulated.

## 2. Understanding Binary Options

Binary options represent a distinct category of financial contracts, differing significantly in structure, payoff, and market perception from traditional options traded on major exchanges. Understanding these differences is crucial to comprehending their regulatory treatment and suitability for various trading venues.

### 2.1 Definition and Core Mechanics

A binary option is a type of options contract where the payout is entirely dependent on the outcome of a 'yes/no' proposition.[1] Typically, this proposition relates to whether the price of an underlying asset will be above or below a specific price (the strike price) at a predetermined expiration time.[2] If the condition is met at expiration (the option expires "in-the-money"), the holder receives a predetermined, fixed monetary amount. If the condition is not met (the option expires "out-of-the-money"), the holder receives nothing, losing the initial investment.[1]

This structure leads to several common alternative names, including "all-or-nothing options," "digital options," and "fixed-return options (FROs)".[1] These terms underscore the unique payoff profile: the magnitude of the underlying asset's price movement beyond the strike price is irrelevant to the payout amount, which is fixed.[6]

A key mechanical difference from traditional options is the automatic exercise feature. Once acquired, the binary option holder makes no further decision regarding exercise; the contract settles automatically based on the outcome of the proposition at expiration.[1] This contrasts with standard American-style options where the holder chooses when to exercise, or European-style options where exercise occurs at expiration if advantageous, but still often involves a decision or action.

Crucially, binary options do not grant the holder the right to buy or sell the underlying asset.[1] Unlike vanilla options, which derive value from the potential to acquire or dispose of the underlying, binary options are purely contracts based on a price prediction.[2] This lack of underlying ownership potential positions them distinctly as speculative instruments focused solely on price direction relative to a fixed point in time, rather than tools for acquiring or hedging positions in the underlying asset itself.

### 2.2 Underlying Assets and Instruments

The underlying reference for a binary option can span a wide range of assets and indicators. Common underlyings include individual stocks, stock indices (like the S&P 500 or Dow Jones), commodities (such as gold, silver, crude oil, or agricultural products), and foreign currency pairs (forex).[1] Furthermore, binary options, or functionally similar instruments often termed "event contracts," can be based on the occurrence of specific events, such as the release of economic data (e.g., jobless claims), weather phenomena, or even political outcomes.[6] This broad applicability across asset classes and event types complicates their straightforward classification under traditional regulatory silos like "securities" or "commodities."

Binary option contracts typically specify a strike price, which is the threshold level the underlying asset's price must cross (or not cross), and a precise expiration date and time.[2] The timeframes for these contracts can be extremely short, ranging from minutes or hours to days or weeks.[4] The prevalence of very short-term expirations contributes significantly to their speculative nature and appeal for high-frequency wagering.[10]

### 2.3 Key Differences from Traditional Options

Binary options diverge from traditional "vanilla" options (standard puts and calls traded on exchanges) in several fundamental ways:

1. **Payout Structure:** Binary options offer a fixed, predetermined payout if in-the-money, or zero if out-of-the-money.[1] Traditional options have a variable profit potential determined by the difference between the underlying asset's price and the strike price at exercise or expiration; the further in-the-money, the greater the potential profit.[2]
2. **Ownership Potential:** Binary options provide no right or potential to own the underlying asset.[1] Traditional options (especially American-style or physically settled contracts) can confer the right to buy or sell the underlying asset.[2]
3. **Risk Profile:** Both option types generally have capped risk, limited to the premium or amount paid for the option. However, binary options also have a capped reward (the fixed payout), whereas traditional options offer variable, potentially substantial, rewards depending on the underlying asset's price movement.[2]
4. **Regulation:** While traditional options are predominantly traded on highly regulated national securities exchanges [2], binary options have historically been plagued by trading on unregulated or poorly regulated internet platforms, leading to significant fraud concerns.[1] Legal trading in major jurisdictions is now confined to specific regulated venues (DCMs in the US) or banned entirely for retail (EU).[12]
5. **Exercise Mechanism:** Binary options exercise automatically at expiration.[1] Traditional options typically require a decision by the holder on whether and when to exercise (before or at expiration, depending on style).[14]

The structural differences – particularly the fixed payout, lack of ownership rights, and automatic exercise – mean that binary options function less like traditional investment or hedging instruments and more like event-based wagers. This inherent structure makes them difficult to integrate into regulatory frameworks designed for conventional securities or derivatives and drives the distinct regulatory approaches observed globally.

**Table 1: Comparison of Binary Options and Traditional Options**

| Feature | Binary Options | Traditional (Vanilla) Options |
|---|---|---|
| Payout Structure | Fixed (All-or-Nothing) [1] | Variable (Based on Intrinsic Value) [2] |
| Ownership Potential | None [1] | Potential (Right to Buy/Sell Underlying) [2] |
| Risk / Reward Profile | Capped Risk / Capped Reward [2] | Capped Risk / Variable (Potentially High) Reward [2] |
| Typical Regulation | Varies (Often Unregulated or Specific DCMs) [1] | Regulated Exchanges [2] |
| Exercise Mechanism | Automatic at Expiry [1] | Holder's Decision (Typically) [14] |

### 2.4 Risk Profile and Market Perception

Binary options are unequivocally considered high-risk financial instruments.[2] Their all-or-nothing payout structure means traders face the potential loss of their entire investment on each trade.[4] The typically short-term nature of these contracts encourages speculative behavior rather than long-term investment strategies.[2]

Furthermore, binary options are frequently compared to gambling.[5] This perception stems from the simple yes/no outcome, the fixed odds-like payout structure, and marketing practices that often emphasize ease of use and high potential returns while downplaying the substantial risks and the need for market knowledge.[5] This association significantly influences regulatory attitudes and contributes to the stringent controls or bans imposed in many jurisdictions.

A defining characteristic of the binary options market, particularly the segment operating online outside of established exchanges, is the pervasive issue of fraud.[1]

Regulators like the SEC and CFTC have received numerous complaints and issued extensive warnings regarding fraudulent schemes.[16] Common fraudulent practices include:

- Refusal to credit customer accounts or process withdrawal requests.[1]
- Identity theft through the collection of sensitive personal data.[1]
- Manipulation of trading software to generate losing trades for customers (e.g., arbitrarily extending expiration times until a winning trade becomes a loss).[1]
- Misleading marketing, overstating potential returns, and using fake testimonials.[12]

The scale of this fraud is substantial, with FBI estimates suggesting scammers steal US$10 billion annually worldwide through such schemes.[5] The widespread nature of these problems, facilitated by easily accessible internet platforms often based offshore and beyond the easy reach of domestic regulators [12], created a compelling case for strong regulatory action. The combination of the product's inherent structure, its diverse potential underlyings making classification difficult, and the explosion of fraudulent online platforms targeting retail investors led regulators in major markets to adopt highly restrictive measures – either confining legal trading to a few tightly controlled exchanges (like US DCMs) or imposing outright bans, particularly for retail investors (as seen in the EU). This history and regulatory response make the integration of binary options into other trading systems, like ATS, highly problematic.

## 3. Understanding Alternative Trading Systems (ATS)

Alternative Trading Systems (ATS) represent a significant component of modern financial market structure, particularly in the United States. They operate alongside, and often in competition with, traditional national securities exchanges, but under a distinct regulatory framework.

### 3.1 Definition and Market Function (SEC Regulation ATS)

An ATS is defined under SEC Regulation ATS as a trading venue, typically utilizing a computerized system, that matches the buy and sell orders of multiple participants for *securities*.[19] Functionally, these systems meet the definition of an "exchange" under federal securities laws because they bring together multiple buyers and sellers using established, non-discretionary methods.[21] However, they are permitted to operate without registering as a national securities exchange if they comply with the conditions of an exemption provided under Exchange Act Rule 3a1-1(a) and adhere to the requirements outlined in SEC Regulation ATS (specifically, Rules 300-303).[21]

To operate under this exemption, an ATS must, among other things, register with the

SEC as a broker-dealer and file an initial operation report (Form ATS) before commencing activities.[21] They primarily function to provide alternative sources of liquidity, often specializing in handling large ("block") trades for institutional investors.[22] A key attraction for these large traders is the potential for reduced market impact, as trades executed on many ATS platforms (particularly dark pools) are not displayed publicly before execution, minimizing the risk of adverse price movements triggered by the large order itself.[22]

### 3.2 Distinction from National Securities Exchanges

While both ATSs and national securities exchanges (like NYSE or Nasdaq) facilitate securities trading, they differ significantly in their regulatory status, operational characteristics, and market roles:

1. **Regulation and Oversight:** National securities exchanges are registered as such with the SEC and function as Self-Regulatory Organizations (SROs). SRO status imposes significant obligations, including establishing and enforcing rules governing member conduct, market surveillance, and disciplinary actions.[25] ATSs, conversely, are regulated primarily under Regulation ATS and as broker-dealers.[22] They are generally subject to fewer regulations than exchanges and do not have SRO responsibilities.[25]
2. **Participants:** Exchanges have "members" subject to the exchange's comprehensive rulebook. ATSs have "subscribers".[25] An ATS typically does not set rules governing subscriber conduct beyond their trading activity on the system itself, nor does it discipline subscribers other than by potentially excluding them from trading.[22]
3. **Transparency:** National securities exchanges are considered "lit" markets, meaning they publicly display pre-trade order information (bids, offers, sizes) in real-time, contributing directly to public price discovery.[25] Many ATSs operate as "dark pools," characterized by a lack of pre-trade transparency; orders are not publicly displayed.[23] Post-trade information (details of completed trades) from ATSs is still required to be reported to the consolidated tape or relevant FINRA facilities.[25]
4. **Listing Function:** Exchanges serve as the primary venue for companies to list their shares ("go public").[25] ATSs do not list securities; they facilitate trading in securities that are typically already listed on an exchange or traded over-the-counter (OTC).[25]

The regulatory framework specifically designed for ATS (Regulation ATS) is built upon their function as venues for *securities* trading and leverages the existing broker-dealer regulatory structure. This inherent focus on securities fundamentally shapes their operational scope and limits their applicability to instruments falling outside the SEC's definition of a security.

**Table 2: Comparison of ATS and National Securities Exchanges**

| Feature | Alternative Trading System (ATS) | National Securities Exchange |
|---|---|---|
| Primary Regulation | Regulation ATS / Broker-Dealer Rules [21] | Exchange Act / SRO Rules [25] |
| Oversight Body | SEC / FINRA [20] | SEC / SRO (Self-Regulatory Organization) [25] |
| Typical Instruments | Securities (Equities, Bonds, etc.) [23] | Listed Securities (Equities, Options, etc.) [25] |
| Participants | Subscribers [25] | Members [25] |
| Rule Setting Authority | Limited (System Use Only) [22] | Broad (Member Conduct, Market Rules) [25] |
| Pre-Trade Transparency | Often Low ("Dark") [23] | High ("Lit") [25] |
| Listing Function | No [25] | Yes [25] |

### 3.3 Common Types of ATS

ATS platforms encompass several models, catering to different trading needs:

- **Electronic Communication Networks (ECNs):** These are fully automated systems that match buy and sell orders for securities, often directly between participants without intermediary market makers.[23] ECNs are known for fast execution and are popular among active traders.[23] They may display orders within the ATS or provide data feeds for broader dissemination.[27]
- **Dark Pools:** This is perhaps the most widely known type of ATS. Dark pools are private trading venues, primarily used by institutional investors, that do not display orders publicly before execution.[23] Their main purpose is to allow the trading of large blocks of securities anonymously, thereby minimizing the price impact that such large orders would have on public exchanges.[22]

- **Crossing Networks:** These systems match buy and sell orders at specific times during the trading day, often using prices derived from public markets (like the midpoint between the best bid and offer).[22] They aim to minimize transaction costs and market impact.[23]
- **Call Markets:** These aggregate buy and sell orders over a period and execute them simultaneously at a single clearing price determined at specific times.[23] They are often used for less liquid securities.[23]
- **Broker-Dealer Internalization Systems:** Some large broker-dealers operate internal systems where they attempt to match client orders against their own inventory or other client orders before routing any remaining portion to external venues.[23]

### 3.4 Regulatory Oversight (SEC, FINRA)

ATSs operate under a layered regulatory structure involving both the SEC and FINRA:

- **SEC Regulation ATS:** This is the core regulation governing ATS operations. It mandates registration as a broker-dealer, filing of Form ATS (and Form ATS-N for NMS Stock ATSs, which requires detailed public disclosures about operations and potential conflicts [22]), maintaining books and records, ensuring confidentiality of trading information, and potentially meeting fair access and systems capacity/integrity requirements based on trading volume thresholds.[21] The SEC does not "approve" an ATS via Form ATS; the form serves as a notice.[21]
- **FINRA Membership and Rules:** Because ATSs must register as broker-dealers, their operators are typically required to be members of FINRA.[20] As FINRA members, they are subject to the full range of FINRA rules governing broker-dealer conduct, including supervision, anti-manipulation rules, trade reporting, and business continuity planning.[25] FINRA plays a crucial role in overseeing ATS trading activity through its market surveillance programs and by operating the trade reporting facilities (TRFs, ORF, TRACE) where ATS trades must be reported.[25]
- **Regulation SCI:** For ATSs that handle significant trading volume in NMS stocks, municipal securities, or corporate debt securities (and potentially government securities under proposed rules), the stricter requirements of Regulation Systems Compliance and Integrity (SCI) may apply.[31] Reg SCI mandates robust policies and procedures regarding system capacity, integrity, resiliency, availability, security, business continuity, and disaster recovery.[32]

The existence of "dark" ATSs reflects a regulatory judgment that, for *securities* trading, the benefits of facilitating large institutional trades with reduced market impact can outweigh the costs of reduced pre-trade transparency, provided robust post-trade reporting and general market oversight are maintained. However, this tolerance for opacity is specific to the securities context and driven by market structure considerations for those instruments. It contrasts sharply with the regulatory approach to binary options, where the primary concerns about fraud and inherent product risk have led regulators to mandate *increased* transparency and oversight, typically through designated "lit" exchanges, running counter to the operational model of many ATSs.

## 4. Regulatory Landscape for Binary Options

The regulatory treatment of binary options varies significantly across major financial jurisdictions, driven largely by concerns over investor protection, the product's speculative nature, and widespread fraudulent activity associated with unregulated platforms.

### 4.1 United States

In the U.S., regulatory authority over binary options is divided between the CFTC and the SEC, depending primarily on the underlying asset or reference point of the option contract.

- **CFTC Jurisdiction:** The CFTC generally oversees binary options based on commodities (including foreign currencies, metals like gold and silver, energy products like crude oil, and agricultural goods like corn), broad-based stock indices (treated as commodities), and certain specified events.[1] These are typically classified as commodity options or, in some cases (like event contracts), as swaps.[34] Under the Commodity Exchange Act (CEA), it is illegal for entities to solicit or accept orders from U.S. customers for commodity options unless those transactions are conducted on a CFTC-registered exchange, known as a Designated Contract Market (DCM).[1]
- **Legal Trading Venues (DCMs):** Consequently, the only legal venues for U.S. persons to trade CFTC-regulated binary options are these DCMs. Currently or recently active DCMs offering such products include the North American Derivatives Exchange (Nadex), which specializes in binary options [9], the Chicago Mercantile Exchange (CME Group), which offers functionally similar "Event Contracts" based on its futures markets [9], and KalshiEX, which focuses on event contracts based on a wider range of real-world occurrences.[37] Cantor Exchange (CX Futures Exchange) previously offered binary options but discontinued them in 2019.[39] Any platform offering commodity binary options to U.S. residents that is not one of these registered DCMs is operating illegally.[12]
- **SEC Jurisdiction:** Binary options whose payout is based on the value of a

security (such as the stock of a single company) or a narrow-based index of securities may fall under the SEC's jurisdiction, potentially classified as securities themselves or as security-based swaps.[1] If classified as a security, the offering must be registered with the SEC or qualify for an exemption, and the platform facilitating the trading might need to register as a national securities exchange or a broker-dealer (potentially operating as an ATS if meeting the criteria).[1] The SEC approved the listing of certain binary options (Fixed Return Options or FROs) on the Cboe (formerly CBOE) in 2008.[7] However, the prevalence and regulatory focus on SEC-jurisdiction binary options appear much lower compared to those under CFTC oversight.
- **Regulatory Warnings and Fraud:** Both the SEC and CFTC have issued numerous alerts warning investors about the high risks and widespread fraud associated with binary options, particularly those offered through unregistered, internet-based platforms often located offshore.[1] These platforms are known for deceptive marketing, refusing withdrawals, manipulating software, and identity theft.[1] U.S. regulators actively pursue enforcement actions against unregistered platforms soliciting U.S. customers.[34] The CFTC maintains a Registration Deficient List (RED List) identifying foreign entities potentially operating illegally.[12]

The fragmented jurisdiction in the U.S. complicates a uniform approach. However, the clear regulatory mandate is that legally permissible binary options trading involving U.S. persons must occur on specifically designated and regulated exchanges (primarily CFTC-regulated DCMs), not on generic trading platforms or unregulated websites.

### 4.2 European Union

The European Union, coordinated by the European Securities and Markets Authority (ESMA), has adopted a more restrictive stance towards binary options, particularly for retail investors.

- **ESMA Intervention:** Utilizing product intervention powers granted under the Markets in Financial Instruments Regulation (MiFIR), ESMA implemented temporary EU-wide measures starting in July 2018.[13] These measures prohibited the marketing, distribution, or sale of binary options to *retail* clients.[13]
- **Rationale for Ban:** The prohibition was driven by significant investor protection concerns, including the product's complexity, inherent high risk of loss, structural conflicts of interest (where the provider often profits directly from client losses), and aggressive or misleading marketing practices observed across the industry.[13]
- **Permanent National Measures:** Following the expiry of ESMA's temporary EU-wide measures (after several renewals [45]), many National Competent

Authorities (NCAs) within individual EU member states adopted permanent national measures that effectively continued the ban on selling binary options to retail clients.[47] Examples include the Central Bank of Ireland and France's Autorité des Marchés Financiers (AMF).[47]

- **Pre-Ban Environment:** Prior to the ESMA intervention, binary options were widely offered across Europe, often by firms regulated under the Markets in Financial Instruments Directive (MiFID) framework, frequently passporting services across the EU from jurisdictions like Cyprus.[7] While technically classified as financial instruments under MiFID, allowing them potentially to be traded on regulated venues like Multilateral Trading Facilities (MTFs - the EU equivalent of ATSs) [50], the widespread problems associated with their offering led to the eventual retail ban. There is limited evidence suggesting significant trading volume occurred on MTFs, which primarily handle more traditional financial instruments.[52]

The EU's decisive action to ban retail binary options trading underscores the regulatory view of these products as unsuitable for the general investing public due to their risk and associated misconduct.

### 4.3 Other Jurisdictions

The trend towards restriction or prohibition extends beyond the US and EU:

- **Australia:** The Australian Securities & Investments Commission (ASIC) banned the sale of binary options to retail clients effective from May 2021, deeming them high-risk and unpredictable investments.[5]
- **Canada:** Provincial regulators have effectively banned the trading of binary options (especially those with expirations under 30 days) for retail investors.[54]
- **Israel:** Following investigations exposing widespread fraud originating from the country, Israel banned the sale of binary options domestically and prohibited Israeli firms from offering them abroad.[5]
- **United Kingdom:** The Financial Conduct Authority (FCA) implemented rules making the sale of binary options to retail consumers illegal, mirroring the ESMA measures pre-Brexit.[9]
- **India:** Binary options trading is not authorized or regulated by the Securities and Exchange Board of India (SEBI) and is considered illegal.[9]
- **Singapore:** The Monetary Authority of Singapore (MAS) has issued strong warnings about the risks of trading binary options, particularly with unregulated platforms, although it has established a regulatory framework.[56]

This global pattern highlights a strong consensus among regulators regarding the dangers binary options pose, particularly to retail investors.

**Table 3: Regulatory Status of Binary Options (US vs. EU - Retail Focus)**

| Jurisdiction | Primary Regulator(s) | Retail Trading Status | Legal Venues (if permitted) | Key Concern Driving Regulation |
|---|---|---|---|---|
| US | CFTC / SEC [1] | Permitted (Highly Restricted) [12] | CFTC-Regulated DCMs / SEC-Regulated Exchanges [12] | Fraud on Unregistered Platforms [16] |
| EU | ESMA / NCAs [47] | Prohibited [13] | N/A (Banned for Retail) | Investor Protection / Product Risk / Fraud [13] |

The lack of consistent global classification – being treated variously as securities, commodity options, swaps, financial instruments under MiFID, or simply akin to gambling – makes applying standardized trading venue rules challenging. This ambiguity, however, has not stopped regulators from acting decisively. The overwhelming trend is towards tight restriction or outright prohibition, driven by the product's risk profile and the history of fraud. This regulatory posture, focused on containment and heightened oversight, is fundamentally incompatible with the operational model and regulatory framework of ATSs, which cater primarily to institutional trading of established securities, sometimes with reduced transparency.

## 5. Permitted Instruments on Alternative Trading Systems

The types of financial instruments that can be legally and practically traded on Alternative Trading Systems are largely determined by the scope of the governing regulation, Regulation ATS, and the operational capabilities of these venues.

### 5.1 Scope of Regulation ATS (Focus on "Securities")

Regulation ATS explicitly defines an ATS based on its function of bringing together purchasers and sellers of *securities*, or otherwise performing functions commonly performed by a stock exchange with respect to *securities*.[19] The regulation's applicability is therefore tied to the definition of "security" under the Securities Exchange Act of 1934. This definition is broad, encompassing traditional instruments like stocks (equity securities) and bonds (debt securities), but also includes certain types of options *on securities* and other investment contracts.[26]

Regulation ATS itself does not provide an exhaustive list of permitted instruments. Instead, its scope is determined by whether the instrument being traded falls under the legal definition of a security overseen by the SEC. Notably, Rule 3a1-1 provides an exemption from the definition of "exchange" (allowing operation as an ATS) for systems that trade *only* government securities and certain related instruments like repurchase agreements on government securities.[26] Proposals have been made to bring these government securities ATSs more fully under Regulation ATS requirements.[31]

### 5.2 Typical Instruments Traded

Based on regulatory filings, market data, and industry guidance, the following types of instruments are commonly traded on ATS platforms in the U.S.:

- **Equities:** This is the most significant category. ATSs facilitate substantial volume in National Market System (NMS) stocks (those listed on national exchanges like NYSE and Nasdaq) as well as unlisted, over-the-counter (OTC) equity securities.[25] Many well-known ATSs, particularly dark pools, focus heavily on equity trading.[60]
- **Fixed Income Securities:** ATSs also serve as important venues for trading debt instruments, including corporate bonds and municipal securities.[23] Specialized ATSs cater to the specific needs of fixed income market participants.[62]
- **Government Securities:** U.S. Treasury securities and Agency securities are traded on certain ATS platforms.[31] As noted, these have historically operated under a specific exemption but are subject to proposed regulatory changes.[31]
- **Security-Based Swaps (SBS):** While the broader swaps market falls under CFTC jurisdiction, swaps based on single securities, loans, or narrow-based security indices are defined as security-based swaps and regulated by the SEC.[64] Trading platforms specializing in SBS may be required to register as Security-Based Swap Execution Facilities (SBSEFs) under Regulation SE, a distinct framework from Regulation ATS.[66] The lines can be complex, but dedicated SBS platforms generally fall under the SBSEF regime.[68]
- **Listed Options:** The primary markets for standardized options listed on exchanges (e.g., options on individual stocks or broad-based indices traded on Cboe, Nasdaq PHLX, etc.) are the national securities exchanges themselves. While Regulation ATS applies to systems trading "securities," which can include options on securities, ATSs are not the typical venue for listed options trading. FINRA rules contemplate ATSs potentially displaying options quotes or handling options orders [27], and market access rules apply to options trading through

ATSs.[71] However, the high-volume, high-speed, transparent nature of listed options trading is generally better served by the infrastructure and specific regulatory models of dedicated options exchanges. Furthermore, FINRA is considering new reporting rules for *OTC* options that have terms similar to listed options, indicating a current lack of standardized reporting for such instruments, distinct from ATS reporting for equities or bonds.[72]

The common theme across these instrument types is their classification as securities (or potentially security-based swaps) under SEC jurisdiction. The infrastructure supporting ATSs, including reporting mechanisms and regulatory oversight, is built around these classifications.

### 5.3 Role of FINRA Rules and Reporting (TRACE, ORF, TRF)

As most ATS operators are FINRA-member broker-dealers, FINRA rules and reporting systems are integral to ATS oversight and post-trade transparency. Trades executed on ATSs must be reported promptly to the appropriate FINRA facility, depending on the instrument type [25]:

- **Trade Reporting Facility (TRF):** For transactions in NMS (exchange-listed) stocks executed otherwise than on an exchange (including on ATSs).[25]
- **OTC Reporting Facility (ORF):** For transactions in OTC (unlisted) equity securities.[25]
- **Trade Reporting and Compliance Engine (TRACE):** For transactions in eligible fixed income securities, including corporate bonds, agency debt, securitized products, and, more recently, U.S. Treasury securities.[25]

This reporting ensures that even trades executed in "dark" ATSs become part of the public market data record after execution, contributing to overall market transparency and regulatory surveillance.[25] The existence and design of these specific reporting facilities, tailored for equities and fixed income securities, further underscore the focus of the ATS ecosystem on these traditional asset classes. The absence of a similar dedicated reporting pathway via FINRA facilities for binary options traded on ATSs implies they are not contemplated within this structure.

The consistent focus on SEC-defined securities across Regulation ATS, typical ATS operations, and associated FINRA reporting mechanisms strongly indicates that instruments falling outside this definition, such as CFTC-regulated commodity options or swaps (which include most legally traded binary options in the US), are not within the intended scope of ATS platforms.

## 6. Analysis: Trading Binary Options on ATS Platforms

Evaluating the possibility of binary options trading on ATS platforms requires examining the alignment between the nature of binary options, the regulatory framework governing ATSs, and the operational realities of these trading venues.

### 6.1 Regulatory Fit: Are Binary Options Typically "Securities" Under Regulation ATS?

The core issue lies in classification. Regulation ATS governs platforms trading "securities" as defined under the Securities Exchange Act of 1934.[19] While the definition of a security can be broad and includes various types of options *on securities* [58], the application to binary options is complex and often unfavorable for ATS inclusion.

- **Potential Security Classification:** A binary option whose payoff is directly tied to the price movement of a single company's stock or a narrow-based index of securities *could* potentially be classified as a security by the SEC.[1] The SEC's approval in 2008 for Cboe to list certain binary options (FROs) lends credence to this possibility in specific circumstances.[7] If such an instrument were deemed a security, and not a security-based swap requiring an SBSEF, trading it on an ATS might theoretically be possible if all other Regulation ATS requirements were met.
- **Predominant Non-Security Classification:** However, the vast majority of instruments commonly referred to as binary options are based on underlyings like commodities (currencies, metals, energy), broad-based indices, or specific events.[1] These typically fall under the jurisdiction of the CFTC, which regulates them as commodity options or swaps.[12] Instruments regulated by the CFTC under the Commodity Exchange Act are generally *not* considered "securities" for the purposes of SEC regulations like Regulation ATS.[26]
- **Event Contracts:** The rise of "event contracts" offered by platforms like CME and Kalshi further illustrates this point. These contracts, which share the binary payout structure, are explicitly regulated by the CFTC as futures or swaps and traded on DCMs, not ATSs.[36] Ongoing legal challenges regarding whether certain event contracts constitute "gaming" highlight the regulatory complexities but confirm their position outside the SEC's securities framework.[38]

Therefore, while a narrow theoretical case might exist for certain security-linked binary options, the overwhelming majority of these instruments, particularly those legally traded in the US or previously common internationally, do not meet the "security" definition required for trading under Regulation ATS.

### 6.2 Explicit Regulatory Mentions (or lack thereof)

A review of Regulation ATS (17 CFR Part 242, Rules 300-303) reveals no explicit mention of binary options, nor any specific provisions designed to accommodate their unique structure.[26] The regulation's language and requirements consistently revolve around the trading of securities like stocks and bonds.

Furthermore, extensive guidance and enforcement materials from the SEC and FINRA concerning ATS operations focus almost exclusively on equities, fixed income, and government securities.[19] There is a notable absence of discussion, rules, or interpretive letters addressing the prospect of binary options trading on these platforms.

This silence contrasts sharply with the explicit regulatory actions taken elsewhere. The CFTC has clearly designated DCMs as the required venues for trading commodity binary options.[12] Similarly, ESMA and other international regulators explicitly addressed binary options when imposing bans.[5] The lack of any similar specific address within the ATS framework strongly suggests that binary options are not considered within its scope.

### 6.3 Operational Compatibility

Beyond the regulatory classification, operational challenges could hinder the trading of binary options on typical ATS platforms:

- **Matching Logic:** ATS matching engines commonly use price-time priority or pro-rata algorithms designed for standard limit and market orders in securities.[78] Binary options, with their fixed payout based on a yes/no outcome relative to a strike price and expiration time, require a different matching logic that may not align with these standard engines. The concept of a continuous order book with evolving bid/ask prices is less applicable to the discrete, event-based nature of binary options.
- **Recordkeeping and Reporting:** While ATSs have robust recordkeeping requirements under Rules 301, 302, and 303, these are tailored for securities transactions (capturing price, size, time, etc.).[21] Integrating the specific parameters of binary options (strike, expiration, underlying event/condition, fixed payout) into these systems and reporting them via Form ATS or ATS-R might necessitate significant modifications and regulatory interpretation.
- **Fair Access:** Applying the Fair Access Rule (Rule 301(b)(5)) to binary options could be complex.[26] Establishing non-discriminatory access standards might need to consider the unique risk profile and potential suitability issues associated with

binary options, which differ markedly from traditional equities or bonds.

While potentially surmountable with custom system design, these operational differences suggest that standard ATS infrastructure is not inherently well-suited for binary options trading.

### 6.4 Clarification of "Binary" Protocols vs. Binary Options

It is important to distinguish the financial instrument "binary option" from the technical term "binary protocol" sometimes used in the context of ATSs. Some ATSs, like the UBS ATS, utilize a proprietary "UBS Binary Protocol (UBP)" for data transmission.[60] This refers to the use of binary code (sequences of 1s and 0s) rather than text-based protocols (like FIX) to transmit *standard securities order information* more efficiently and with lower latency.[81] It has no relation to the trading of binary option contracts. Similarly, references to "binary licenses" by ATS technology providers refer to software licensing models, not the financial products traded.[78]

The regulatory and operational frameworks governing ATSs (under SEC oversight for securities) and those governing legally permitted binary options (primarily under CFTC oversight for commodity options/swaps on DCMs) exist as distinct and separate systems. There is no apparent regulatory mechanism or established market practice linking the two. Even if a binary option were structured to qualify as an SEC-regulated security, practical hurdles related to operational systems, market structure, and the product's inherent risks and negative regulatory perception make trading on an ATS highly improbable and commercially impractical compared to using designated, specialized exchanges where permitted.

## 7. Primary Trading Venues for Binary Options

Given that ATS platforms are generally unsuitable and legally impermissible venues for binary options, it is important to identify where these instruments *are* traded, both legally and otherwise.

### 7.1 Regulated US Exchanges (DCMs)

In the United States, the legal trading of binary options and similar event contracts by U.S. persons is restricted to a small number of exchanges registered with the CFTC as Designated Contract Markets (DCMs).

- **Nadex (North American Derivatives Exchange):** Nadex is explicitly identified in regulatory guidance as a CFTC-regulated DCM permitted to offer binary options to U.S. customers.[12] It provides binary option contracts based on forex pairs, stock indices, commodities (like crude oil, gold, natural gas), and certain economic events.[83] Nadex contracts are structured with prices ranging from $0 to $100, where the price reflects the market's perceived probability of the event occurring, and the payout for a successful contract is fixed at $100 (meaning the profit is $100 minus the cost of entry, excluding fees).[85] All trades are fully collateralized.[9]

- **CME Group (Chicago Mercantile Exchange):** While not offering products explicitly labeled "binary options," CME Group launched "Event Contracts" in 2022.[87] These function very similarly, offering a binary outcome (settling at $100 if the prediction is correct, $0 if incorrect, based on recent changes from an initial $20 scale) based on a yes/no proposition about the closing price of underlying CME futures contracts.[36] Available underlyings include major equity indices (E-mini S&P 500, Nasdaq 100), metals (gold, silver, copper), energy (crude oil, natural gas), currencies (Euro/USD), and Bitcoin futures.[36] CME Group emphasizes that its event contracts differ from banned offshore binary options because their settlement is tied to the transparent, regulated prices of its underlying futures markets.[87] CME is a CFTC-regulated DCM.[12]
- **KalshiEX:** Kalshi operates as a CFTC-regulated DCM focused specifically on event contracts.[37] It offers contracts based on a wide array of real-world events, including economic indicators (inflation, GDP, Fed decisions), political outcomes, weather events, scientific milestones, and cultural events (like award shows).[76] Like Nadex and CME Event Contracts, Kalshi contracts have a binary payout structure ($1 per contract if correct, $0 otherwise, though often discussed in terms of a $100 payout for 100 contracts) with prices reflecting perceived probabilities.[90] Kalshi has faced regulatory challenges from the CFTC regarding certain contracts, particularly those related to political election outcomes, with the CFTC arguing they constitute prohibited "gaming" under the CEA.[38] This highlights the ongoing debate about the boundaries of permissible event-based derivatives, even on regulated venues.[38]

The concentration of legal U.S. trading onto these few specialized DCMs underscores the highly controlled nature of this market segment, distinct from the broader securities markets served by ATSs.

### 7.2 Historical Venues

- **Cantor Exchange (CX Futures Exchange):** Previously a CFTC-registered DCM, Cantor offered binary options on forex, gold, and weather events.[39] However, it ceased listing forex and gold binary options effective March 29, 2019.[39] The exchange later settled with the CFTC regarding various operational and reporting violations that occurred prior to its closure, illustrating the compliance challenges even for regulated entities in this space.[40]

- **Cboe (formerly CBOE):** As mentioned, the SEC approved Cboe to list certain types of binary options, known as Fixed Return Options (FROs), in 2008.[7] These were based on securities indices and individual stocks. However, the current availability and trading volume of such products on Cboe appear minimal compared to the activity on CFTC-regulated DCMs.

### 7.3 Unregulated Offshore Platforms

Despite regulatory efforts in the US and EU, a significant portion of the global binary options market continues to operate through internet-based trading platforms that are not registered or regulated in major jurisdictions.[1] These platforms are often based offshore, making regulatory oversight and investor recourse difficult.[12] They frequently target retail investors globally, including in regions like Asia where interest has reportedly grown, sometimes operating in legal grey areas or in direct violation of local regulations (e.g., soliciting US or EU clients illegally).[56] These unregulated platforms remain the primary source of the widespread fraud and investor complaints associated with binary options.[16]

The existence and challenges posed by event contracts on regulated platforms like Kalshi and CME further illustrate the difficulty in fitting binary-outcome products into traditional financial frameworks. This complexity, coupled with the persistent association with gambling and fraud, reinforces their segregation from mainstream securities trading venues like ATSs.

## 8. Conclusion

The analysis of binary options, Alternative Trading Systems (ATS), their respective regulatory frameworks, and current market practices leads to a clear conclusion regarding the feasibility of trading binary options on ATS platforms.

### 8.1 Summary of Findings on Binary Options Regulation and Venues

Binary options are unique financial contracts with an all-or-nothing payout structure based on a yes/no proposition regarding an underlying asset or event. They carry significant risks, are often compared to gambling, and have been plagued by widespread fraud, particularly through unregulated online platforms. Consequently, regulators in major jurisdictions have taken stringent measures. The EU has banned their marketing, distribution, and sale to retail clients. The US permits them only under strict conditions: commodity-based binary options and event contracts must trade exclusively on CFTC-regulated Designated Contract Markets (DCMs), while the rare security-based binary option would require SEC registration or exemption and trading on an appropriate SEC-regulated venue (exchange or potentially ATS, though this is not standard practice). The primary legal venues in the US are specialized DCMs like Nadex, CME Group (for Event Contracts), and KalshiEX.

### 8.2 Summary of Findings on ATS Scope and Regulation

Alternative Trading Systems (ATS) are SEC-regulated venues, operating under Regulation ATS, designed to facilitate the matching of buy and sell orders for *securities*. They function as alternatives to national securities exchanges, must register as broker-dealers, and are typically subject to FINRA oversight. Common examples include Electronic Communication Networks (ECNs) and dark pools. Their regulatory framework, operational design, and associated reporting systems (TRF, ORF, TRACE) are centered around the trading of equities, bonds, and other instruments classified as securities under federal securities laws.

### 8.3 Definitive Answer

Based on the evidence and analysis presented, binary options are **not typically or legally traded on Alternative Trading Systems (ATS)** in the current regulatory environment, particularly in the United States and the European Union.

The fundamental reasons for this conclusion are:

1. **Regulatory Mismatch:** ATSs are governed by SEC Regulation ATS, which is specifically designed for platforms trading *securities*. The vast majority of binary options, particularly those based on commodities, forex, or events, fall under the jurisdiction of the CFTC in the US, which mandates their trading on Designated Contract Markets (DCMs), a separate category of regulated exchange. In the EU, retail binary options are banned altogether.
2. **Instrument Classification:** Most binary options do not meet the definition of a "security" as required for an instrument to be traded on a platform operating under Regulation ATS. They are more commonly classified as commodity options or swaps (under CFTC rules) or have been subject to specific financial instrument regulations (and subsequent bans) in Europe.
3. **Designated Venues:** Regulators have explicitly channeled the legal trading of binary options and similar event contracts into highly controlled environments – specifically, CFTC-regulated DCMs in the US. This contrasts directly with the ATS model, which allows for operation under an exemption from full exchange registration.
4. **Operational Differences:** The unique structure of binary options (yes/no proposition, fixed payout, specific expiration) may present operational challenges for standard ATS matching engines and reporting systems, which are built around

the price/quantity dynamics of traditional securities.

5. **Lack of Market Practice:** There is no evidence in the reviewed materials or established market practice indicating that ATS platforms are used for trading binary options. The legally sanctioned venues are distinct and specialized.

Therefore, while a theoretical edge case might exist for a binary option structured specifically as an SEC-regulated security, the practical reality is that ATS platforms are not the appropriate or permissible venue for the instruments commonly understood and traded as binary options. Investors seeking to trade binary options legally in the US must use CFTC-regulated DCMs like Nadex, CME Group, or KalshiEX. Extreme caution is advised due to the high risks inherent in these products and the significant prevalence of fraudulent, unregulated platforms operating globally.

#### Works cited


1. CFTC/SEC Investor Alert: Binary Options and Fraud, accessed April 21, 2025, https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/fraudadv_binaryoptions.html
2. Binary Option: Definition, How They Trade, and Example - Investopedia, accessed April 21, 2025, https://www.investopedia.com/terms/b/binary-option.asp
3. Binary Options Strategies You Should Know - Investopedia, accessed April 21, 2025, https://www.investopedia.com/articles/active-trading/052014/binary-options-strategies.asp
4. The Basics of Investing In Binary Options - Washington State Department of Financial Institutions, accessed April 21, 2025, https://dfi.wa.gov/financial-education/information/basics-investing-binary-options
5. Binary option - Wikipedia, accessed April 21, 2025, https://en.wikipedia.org/wiki/Binary_option
6. Futures Glossary | CFTC, accessed April 21, 2025, https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/CFTCGlossary/index.htm
7. Binary options - MarketsWiki, A Commonwealth of Market Knowledge, accessed April 21, 2025, https://www.marketswiki.com/wiki/Binary_options
8. Investor Alert: Binary options and Fraud - SEC.gov, accessed April 21, 2025, https://www.sec.gov/investor/alerts/ia_binary.pdf
9. Trading Forex With Binary Options - Investopedia, accessed April 21, 2025, https://www.investopedia.com/articles/forex/022415/trading-forex-binary-options.asp
10. What Are Binary Options? - SmartAsset, accessed April 21, 2025, https://smartasset.com/investing/what-are-binary-options
11. Nadex 5-minute binary options explained, accessed April 21, 2025, https://www.nadex.com/learning/nadex-5-minute-binary-options-explained/

12. Beware of Off-Exchange Binary Options Trades | CFTC, accessed April 21, 2025, https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/beware_of_off_exchange_binary_options.htm
13. ESMA adopts final product intervention measures on CFDs and binary options, accessed April 21, 2025, https://www.esma.europa.eu/press-news/esma-news/esma-adopts-final-product-intervention-measures-cfds-and-binary-options
14. Binary Options - Explanation of What This Option Type Is - OptionsTrading.org, accessed April 21, 2025, https://www.optionstrading.org/basics/option-types/binary/
15. Is There A State Role For Binary Option Regulation? - The National Law Review, accessed April 21, 2025, https://natlawreview.com/article/there-state-role-binary-option-regulation
16. Binary Options Fraud | CFTC, accessed April 21, 2025, https://www.cftc.gov/BinaryOptionsFraud/index.htm
17. Binary Options Fraud | Investor.gov, accessed April 21, 2025, https://www.investor.gov/protect-your-investments/fraud/types-fraud/binary-options-fraud
18. Avoid Unregistered Binary Options Trading Platforms | CFTC, accessed April 21, 2025, https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/avoid_unregistered_binary_options_platforms.htm
19. Guidance for Alternative Trading Systems - finra, accessed April 21, 2025, https://www.finra.org/sites/default/files/2023-08/MAP-Guidance-for-Alternative-Trading-Systems.pdf
20. Guidance for Alternative Trading Systems | FINRA.org, accessed April 21, 2025, https://www.finra.org/compliance-tools/map-tools/alternative-trading-systems-guidance
21. Alternative Trading System ("ATS") List - SEC.gov, accessed April 21, 2025, https://www.sec.gov/foia-services/frequently-requested-documents/alternative-trading-system-ats-list
22. Alternative Trading System (ATS) Definition and Regulation - Investopedia, accessed April 21, 2025, https://www.investopedia.com/terms/a/alternative-trading-system.asp
23. Alternative Trading System (ATS) Regulation and Requirements, accessed April 21, 2025, https://www.innreg.com/blog/alternative-trading-system-ats-regulation-and-requirements
24. What is an Example of an Alternative Trading System? - Realized 1031, accessed April 21, 2025, https://www.realized1031.com/blog/what-is-an-example-of-an-alternative-trading-system
25. Where Do Stocks Trade? | FINRA.org, accessed April 21, 2025, https://www.finra.org/investors/insights/where-do-stocks-trade
26. 17 CFR Part 242 - Regulation ATS—Alternative Trading ... - eCFR, accessed April

21, 2025,
https://www.ecfr.gov/current/title-17/chapter-II/part-242/subject-group-ECFRac2946ebe78200b
27. 6279. Alternative Trading Systems | FINRA.org, accessed April 21, 2025, https://www.finra.org/rules-guidance/rulebooks/finra-rules/6279
28. An Introduction to Dark Pools - Investopedia, accessed April 21, 2025, https://www.investopedia.com/articles/markets/050614/introduction-dark-pools.asp
29. Form ATS-N Filings and Information - SEC.gov, accessed April 21, 2025, https://www.sec.gov/about/divisions-offices/division-trading-markets/alternative-trading-systems/form-ats-n-filings-information
30. Regulatory Notice 18-25 | FINRA.org, accessed April 21, 2025, https://www.finra.org/rules-guidance/notices/18-25
31. Regulation ATS for ATSs That Trade U.S. Government Securities, NMS Stock, and Other Securities; Regulation SCI for ATSs That Trade U.S. Treasury Securities and Agency Securities; and Electronic Corporate Bond and Municipal Securities Markets - SEC.gov, accessed April 21, 2025, https://www.sec.gov/rules-regulations/2020/09/regulation-ats-atss-trade-us-government-securities-nms-stock-other-securities-regulation-sci-atss
32. Regulation Systems Compliance and Integrity - SEC.gov, accessed April 21, 2025, https://www.sec.gov/files/rules/final/2014/34-73639.pdf
33. [Traders Magazine] Growth of ATSs: Implications for Liquidity and Market Structure, accessed April 21, 2025, https://www.blueocean-tech.io/2025/02/07/traders-magazine-growth-of-atss-implications-for-liquidity-and-market-structure/
34. CFTC Orders Event-Based Binary Options Markets Operator to Pay $1.4 Million Penalty, accessed April 21, 2025, https://www.cftc.gov/PressRoom/PressReleases/8478-22
35. CFTC Issues Cease and Desist Order to Binary Options Operator Using Smart Contracts, accessed April 21, 2025, https://www.blockchainandthelaw.com/2022/01/cftc-issues-cease-and-desist-order-to-binary-options-operator-using-smart-contracts/
36. CME Event Contracts - Blue Line Futures, accessed April 21, 2025, https://bluelinefutures.com/cme-event-driven-contracts/
37. Updated: CFTC Grants No-Action Relief for Certain Binary Option Transactions - Westlaw, accessed April 21, 2025, https://content.next.westlaw.com/practical-law/document/I1a77f71fadbb11ebbea4f0dc9fb69570/Updated-CFTC-Grants-No-Action-Relief-for-Certain-Binary-Option-Transactions?viewType=FullText&transitionType=Default&contextData=(sc.Default)
38. Election Contracts and Sports Event Contracts: The Future of Regulated Event-Based Trading | Insights | Holland & Knight, accessed April 21, 2025, https://www.hklaw.com/en/insights/publications/2025/02/election-contracts-and-sports-event-contracts-the-future
39. CX Futures Exchange - Wikipedia, accessed April 21, 2025,

https://en.wikipedia.org/wiki/CX_Futures_Exchange
40. A Guide to Trading Binary Options in the US - Investopedia, accessed April 21, 2025, https://www.investopedia.com/articles/active-trading/061114/guide-trading-binary-options-us.asp
41. Notice of Filing of a Proposed Rule Change Relating to Binary Options (Release No. 34-56471, accessed April 21, 2025, https://www.sec.gov/files/rules/sro/occ/2007/34-56471.pdf
42. US CFTC Takes Action Against Unregistered Crypto and Binary Options Platforms, accessed April 21, 2025, https://charltonsquantum.com/us-cftc-takes-action-against-unregistered-crypto-and-binary-options-platforms/
43. Central Bank of Ireland Binary Options Intervention Measure pursuant to Article 42 of Regulation (EU) No 600/2014 of the European Parliament, accessed April 21, 2025, https://www.centralbank.ie/docs/default-source/Regulation/industry-market-sectors/investment-firms/mifid-firms/regulatory-requirements-and-guidance/central-bank-binary-options-intervention-measure.pdf
44. Europe wide ban on risky binary options - DLA Piper, accessed April 21, 2025, https://www.dlapiper.com/es-pr/insights/publications/2018/10/finance-and-markets-global-insight-issue-15/europe-wide-ban-on-risky-binary-options
45. Notice of ESMA's Product Intervention Renewal Decision in relation to binary options, accessed April 21, 2025, https://www.centralbank.ie/regulation/markets-update/esma-guidelines-and-recommendations/markets-update-issue-14-2018/european-securities-and-markets-authority-(esma)/notice-of-esma-s-product-intervention-renewal-decision-in-relation-to-binary-options
46. ESMA renews binary options prohibition for a further three months from 2 January 2019, accessed April 21, 2025, https://www.esma.europa.eu/press-news/esma-news/esma-renews-binary-options-prohibition-further-three-months-2-january-2019
47. The Central Bank, Binary Options and CFDs, accessed April 21, 2025, https://www.mccannfitzgerald.com/knowledge/financial-services-regulation/the-central-bank-binary-options-and-cfds
48. Binary options and CFDs: the AMF adopts national intervention measures - Autorité des marchés financiers, accessed April 21, 2025, https://www.amf-france.org/en/news-publications/news-releases/amf-news-releases/binary-options-and-cfds-amf-adopts-national-intervention-measures
49. Regulation and Security in Binary Options Trading - The Rocky Mountain Collegian, accessed April 21, 2025, https://collegian.com/sponsored/2023/12/regulation-and-security-in-binary-options-trading/
50. Multilateral trading facility - Wikipedia, accessed April 21, 2025, https://en.wikipedia.org/wiki/Multilateral_trading_facility
51. Emission Trading and Regulation of Financial Markets - Ecologic Institute,

accessed April 21, 2025, https://www.ecologic.eu/sites/default/files/publication/2022/2570-emission-trading-and-regulation-of-financial-markets-web.pdf
52. Multilateral Trading Facility (MTF) - LSEG, accessed April 21, 2025, https://www.lseg.com/en/fx/venues/mtf-multilateral-trading-facility
53. Multilateral Trading Facility (MTF) - Tradeweb Markets, accessed April 21, 2025, https://www.tradeweb.com/our-markets/market-regulation/mtf/
54. Regulation in Crypto and Binary Options Markets: What You Need to Know, accessed April 21, 2025, https://www.fingerlakes1.com/2024/10/17/regulation-in-crypto-and-binary-options-markets-what-you-need-to-know/
55. Binary Options Trading: Risks, Benefits & Strategies | Bajaj Broking, accessed April 21, 2025, https://www.bajajbroking.in/blog/binary-option-trading
56. The Rise of Binary Options Trading in Asia: Trends and Opportunities - Faisal Khan, accessed April 21, 2025, https://faisalkhan.com/knowledge-center/industry-perspective-commentary/the-rise-of-binary-options-trading-in-asia-trends-and-opportunities/
57. MAS Cautions Investors on Risks in Trading Binary Options with Unregulated Platforms - Monetary Authority of Singapore, accessed April 21, 2025, https://www.mas.gov.sg/news/media-releases/2017/mas-cautions-investors-on-risks-in-trading-binary-options-with-unregulated-platforms
58. Binary Options And Securities Regulation, accessed April 21, 2025, https://www.calcorporatelaw.com/2017/09/binary-options-and-securities-regulation
59. Do SEC Acting Chair's Remarks Signal a Redux of Government Securities ATS Rulemaking? - Morgan Lewis, accessed April 21, 2025, https://www.morganlewis.com/pubs/2025/03/do-sec-acting-chairs-remarks-signal-a-redux-of-government-securities-ats-rulemaking
60. UBS ATS FAQs, accessed April 21, 2025, https://www.ubs.com/global/en/investment-bank/electronic-trading/equities/unique-liquidity/_jcr_content/root/contentarea/mainpar/toplevelgrid_491929606/col_1/innergrid_1876722392/col_2/linklist/link_1.0546146785.file/PS9jb250ZW50L2RhbS9hc3NldHMvaWIvZ2xvYmFsL2VsZWN0cm9uaWMtdHJhZGluZy9kb2MvdWJzLWF0cy1mYXFzLTA2MjAyMi5wZGY=/ubs-ats-faqs-062022.pdf
61. UBS ATS FAQs, accessed April 21, 2025, https://www.ubs.com/global/en/investment-bank/electronic-trading/equities/unique-liquidity/_jcr_content/mainpar/toplevelgrid_491929606/col1/innergrid_1876722392/xcol2/linklist/link_1.1030292625.file/PS9jb250ZW50L2RhbS9hc3NldHMvaWIvZ2xvYmFsL2VsZWN0cm9uaWMtdHJhZGluZy9kb2MvdWJzLWF0cy1mYXFzLTA2MjAyMi5wZGY=/ubs-ats-faqs-062022.pdf
62. Corporate Bonds - Trading - Entities - International Finance Bank LTD, accessed April 21, 2025, https://www.intfiba.com/services-and-products/trading/corporate-bonds/
63. What Is a Multilateral Trading Facility (MTF) & How Does It Work? - Investopedia, accessed April 21, 2025,

https://www.investopedia.com/terms/m/multilateral_trading_facility.asp
64. SEC Security-Based Swaps Regulatory Regime | UBS Global, accessed April 21, 2025, https://www.ubs.com/global/en/secsbsd.html
65. The Regulatory Regime for Security-Based Swaps - SEC.gov, accessed April 21, 2025, https://www.sec.gov/swaps-chart/swaps-chart.pdf
66. SEC Launches Regulation for Security-Based Swap Execution Facilities - Latham & Watkins LLP, accessed April 21, 2025, https://www.lw.com/en/insights/2024/02/SEC-Launches-Regulation-for-Security-Based-Swap-Execution-Facilities
67. Final rule: Security-Based Swap Execution and Registration and Regulation of Security-Based Swap Execution Facilities - SEC.gov, accessed April 21, 2025, https://www.sec.gov/files/rules/final/2023/34-98845.pdf
68. Swap Execution Facility (SEF): Definition, Goal and How It Works - Investopedia, accessed April 21, 2025, https://www.investopedia.com/terms/s/swap-execution-facility-sef.asp
69. A Complete Overview of Security-Based Swap Facilities - Datatracks, accessed April 21, 2025, https://www.datatracks.com/us/blog/a-complete-overview-of-security-based-swap-facilities/
70. 6810. Definitions | FINRA.org, accessed April 21, 2025, https://www.finra.org/rules-guidance/rulebooks/finra-rules/6810
71. Market Access | FINRA.org, accessed April 21, 2025, https://www.finra.org/rules-guidance/key-topics/market-access
72. FINRA Requests Comment on Proposed Trade Reporting Requirements for Over-The-Counter Options Transactions, accessed April 21, 2025, https://www.finra.org/rules-guidance/notices/22-14
73. Trade Reporting Frequently Asked Questions | FINRA.org, accessed April 21, 2025, https://www.finra.org/filing-reporting/market-transparency-reporting/trade-reporting-faq
74. Frequently Asked Questions (FAQ) about the Trade Reporting and Compliance Engine (TRACE) | FINRA.org, accessed April 21, 2025, https://www.finra.org/filing-reporting/trace/faq
75. Can You Swim in a Dark Pool? | FINRA.org, accessed April 21, 2025, https://www.finra.org/investors/insights/can-you-swim-dark-pool
76. Event Contracts: What They Are and How They Are Used - Investopedia, accessed April 21, 2025, https://www.investopedia.com/events-contracts-8601422
77. Kalshi v. CFTC Challenges Contracts on Political Events, accessed April 21, 2025, https://www.bhfs.com/insights/alerts-articles/2025/kalshi-v-cftc-challenges-contracts-on-political-events
78. Alternative Trading System/Dark Pool Solution - Argo Software Engineering, accessed April 21, 2025, http://argocons.com/alternative-trading-system-dark-pool/
79. REGULATION OF ALTERNATIVE TRADING SYSTEMS - WilmerHale, accessed April 21, 2025,

https://www.wilmerhale.com/-/media/c531aef8b6ab4f57a7e705acbc69ecab.pdf
80. 17 CFR 242.301 -- Requirements for alternative trading ... - eCFR, accessed April 21, 2025, https://www.ecfr.gov/current/title-17/chapter-II/part-242/section-242.301
81. UBS ATS, accessed April 21, 2025, https://www.ubs.com/global/en/investment-bank/electronic-trading/equities/unique-liquidity/_jcr_content/mainpar/toplevelgrid_491929606/col1/innergrid_1876722392/xcol2/linklist/link_2093927680.1952061127.file/PS9jb250ZW50L2RhbS9hc3NldHMvaWIvZ2xvYmFsL2VsZWN0cm9uaWMtdHJhZGluZy9kb2MvdWJzLWF0cy1iaW5hcnktcHJvdG9jb2wtdWJwLXNwZWNpZmljYXRpb24tb2N0LTIwMTkucGRm/ubs-ats-binary-protocol-ubp-specification-oct-2019.pdf
82. Beware of Binary Options Mobile Apps | CFTC, accessed April 21, 2025, https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/beware_of_binary_options_mobile.htm
83. Trade Stock Indices with Binary Options - Nadex, accessed April 21, 2025, https://www.nadex.com/learning/understanding-indices-trading-with-binary-options/
84. Trade Commodities with Binary Options - Nadex, accessed April 21, 2025, https://www.nadex.com/learning/understanding-commodities-trading-with-binary-options/
85. Are binary options legal in the US? - Nadex, accessed April 21, 2025, https://www.nadex.com/blog/are-binary-options-legal-in-the-us/
86. What are Binary Options and How Do They Work? - Nadex, accessed April 21, 2025, https://www.nadex.com/learning/what-are-binary-options-and-how-do-they-work/
87. CME Group Launches Event Contracts for Retail Investors - Finance Magnates, accessed April 21, 2025, https://www.financemagnates.com/binary-options/cme-group-launches-event-contracts-for-retail-investors/
88. Event contracts: Start your trading journey on the right path - CME Group, accessed April 21, 2025, https://www.cmegroup.com/activetrader/event-contracts/start-your-trading-journey-on-the-right-path.html
89. Report: Kalshi's Business Breakdown & Founding Story | Contrary Research, accessed April 21, 2025, https://research.contrary.com/company/kalshi
90. Kalshi - Prediction Market for Trading Event Contracts, accessed April 21, 2025, https://kalshi.com/
91. Working with Event Contracts - Kalshi, accessed April 21, 2025, https://kalshi.com/blog/article/what-are-event-contracts
92. CFTC Disapproves KalshiEX LLC's Congressional Control Contracts, accessed April 21, 2025, https://www.cftc.gov/PressRoom/PressReleases/8780-23
93. Cantor Futures Exchange (CX Futures Exchange): Overview - Investopedia, accessed April 21, 2025, https://www.investopedia.com/terms/c/cantor-futures-exchange.asp
94. [Traders Magazine] Growth of ATSs: Implications for Liquidity and Market

Structure, accessed April 21, 2025,
https://blueocean-tech.io/2025/02/07/traders-magazine-growth-of-atss-implications-for-liquidity-and-market-structure/