Politician Stock Trading Filing Violations:
Oversight or Deliberate Exploitation of Private Information?

Abstract

This paper examines financial disclosure data of U.S. politicians to determine whether they deliberately violate the STOCK Act of 2012 reporting requirements to conceal and exploit private information. Empirical analysis reveals that 37.79% of politician trades are filed after the required deadline of 45 days mandated by the STOCK Act. The paper further establishes that delinquent filings are not mere coincidence but deliberate efforts to conceal and exploit private information. Notably, purchase violations earn 0.33% higher abnormal returns over a subsequent 10-day period. The study also finds that politicians' attributes influence their tendency to violate. Additionally, the results suggest that politicians earn significantly higher abnormal returns when they trade derivative securities compared to stocks. The positive effect on abnormal returns amplified when they report such transactions after the required deadline of 45 days.

Keywords: Insider Trading, The Stock Act, Filing Violations, Ethics and Corruption

1. Introduction

The 2012 Stop Trading on Congressional Knowledge (STOCK) Act mandates the disclosure of financial transactions within 45 days of the trade of a politician. While the media often highlights U.S. politicians' alleged violation of the Act, no academic study has assessed empirical evidence regarding the rate of these violations or whether the delayed disclosed represent deliberate attempts to hide trades for personal gain. Despite politicians' claims of oversights and clerical errors, the temptation of potential financial benefits from insider information raises questions about deliberate reporting delays to exploit market movements or investment opportunities for maximizing gains or minimizing losses.

A long-standing concern is whether politicians have an unfair advantage in the stock market (O'connor (1989), Ziobrowski et al. (2004), Bainbridge (2010), Kim (2012), Belmont (2022)). A wealth of literature exists determining the likelihood of private information contained in insider transactions. However, politicians arguably have even greater access to non-public information. High-ranking politicians are provided with information from classified briefings on national security, tax policies, legislation, and regulations. Such access to non-public information can create a conflict of interest for politicians who trade stocks in companies affected by such information. Acting on such inside knowledge would naturally motivate politicians to refrain from disclosing information on their financial trades before the information becomes available to the general investing public. High-profile media cases have highlighted politicians profiting from stock trading based on non-public information, raising concerns about STOCK Act violations. According to The New York Times, 97 legislators or their family members engaged in financial transactions potentially influenced by their legislative committee roles between 2019 and 2021. For instance, Representative Alan Lowenthal's spouse, a Democrat from California, sold Boeing

shares just before a committee released damning findings about the company's handling of the 737 Max jet's fatal crashes. Meanwhile, Senator Tuberville from Alabama traded drug companies' stocks during his health committee tenure and sold call options on Microsoft before a $10 billion Department of Defense contract loss during his Armed Services committee tenure. Tuberville delayed reporting around 130 transactions in 2021.

Additionally, senators like Richard Burr from North Carolina, Kelly Loeffler from Georgia, and Diane Feinstein from California sold stocks following a Covid-19 briefing, during which they publicly minimized concerns saying to the American people that there was little cause for concern while divesting their stock holdings to minimize significant losses ahead of the general investing public. Another report by Business Insider in 2023 by Levinthal and Hall shows that 78 members of Congress have violated the STOCK Act.

U.S. politician insider trading has become a pressing issue, prompting the SEC to conduct investigations. For example, the SEC filed claims in federal courts accusing Senator Richard Burr of pre-release Coronavirus information misuse (Sneed, 2021 CNN). Such unethical behavior raises concerns about the political system's integrity and threatens investor trust in the capital market. To address the concern of conflict of interest and insider trading, Congress enacted the STOCK Act, which requires politicians to publicly and promptly disclose any financial transactions made by themselves, their spouses, or dependent children. However, repeated allegations of filing violations have sparked debates on the motivations behind such actions (Zhang (2021)).

Like corporate insiders, information asymmetry provides politicians the opportunity to profit from private information. Prior studies show that insiders delay the disclosure of personal transactions to hinder information signals from reaching the market (Carney (1986), Manne (2005), Cline and Houston (2023)). Insiders strategically delay reporting their transactions to

prevent crucial information signals from being promptly incorporated into market prices (Cheng, Nagar, and Rajan (2007)). This places general investors at a disadvantage, affecting capital allocation and market fairness (Bainbridge (1986), Shin (1996), Yadav (2016)).

Investors' trust in financial markets is essential to function effectively since these markets facilitate the capital allocation between investors and economic actors (Guiso et al. (2008). Investors rely on financial markets to channel savings into productive economic growth and expect long-term returns commensurate with the risk taken. Thus, participants and institutions must act with integrity and transparency to maintain public trust and confidence in these markets (Rezaee (2008)). The STOCK Act restricts disclosure delays to 45 days to curb insider trading. Despite the stringent reporting requirements, reporting violations persist, raising concerns over the public trust and confidence in financial markets. Therefore, it is essential to examine whether politicians violate the STOCK Act for financial advantage by delaying their reporting and limiting any potential insider trading can restore trust in the government, protect the interests of the American people, and uphold confidence in financial markets. Additionally, the motivation is further strengthened by the existing focus of prior studies on the empirical setting of corporate insiders rather than politician insiders, making this study timely and vital.

The idea that insiders attempt to conceal their trades by delaying reporting is well-established in the literature (Seyhun (1986), Cheng, Nagar, and Rajan (2007)). Nonetheless, the study of delinquent insider trading is a relatively new field of research. Cline and Houston (2023) explore corporate insiders, finding that many corporate insiders violate SEC disclosure requirements by reporting after the legally mandated deadline and documenting post-SOX violations at 8%. However, the study of delinquent politicians' trading violations is a fresh area of research. In this study, we focus on U.S. senators as representatives of high-ranking politicians

and examines whether they deliberately violate the STOCK Act reporting requirements for financial advantages. Senators are members of the upper house of Congress and have a significant role in shaping legislation and policy. As such, they often have access to privileged information that could give them an unfair advantage in the stock market (Schweizer (2011)).

. Consistent with Seyhun (1986), Cheng, Nagar, and Rajan (2007), Cline and Houston (2023), we find evidence that politicians delay disclosures to hide their trades. We document that 37.79% of politicians' stock trades from 2012-2022 are reported after the 45-day STOCK Act deadline . We also find evidence that a noteworthy portion of politicians, representing both the Republican and non-Republican parties, encompassing the Democratic and Independent parties, violate the STOCK Act. Our results indicate that 42.92% of trades made by Republican politicians and 21.00% of trades made by non-Republican were reported after the legally mandated deadline. However, such evidence does not indicate purposeful violations. Busy schedules, lack of awareness, and clerical errors by their inattentive staff, accountants, and financial advisors may cause inadvertent errors, mistakes, or delays. Further analysis is necessary to determine the motivation behind such violations.

Given that more than one third of all Senator trades are in violation, we next ask whether these violations result from oversight or intentional gains. To answer these questions, we utilize the hand-collected open market transactions in common stocks and options by U.S. politicians from the periodic transaction report of the U.S. Senate Financial Disclosures website. By exploring the incentives and ramifications of such violations, this study contributes to deepening our understanding of challenges in maintaining transparency, fairness, and accountability financial markets.

Our tests reveal that politicians who violate the disclosure requirements earn significantly higher abnormal returns than non-violators. Politicians who violate earn 0.33% higher abnormal returns after purchase transactions than those who do not violate over a 10-day period after the transactions. This difference in abnormal return is statistically significant at the 5% level. For sales, the mean CAR of violation is 0.37%, and for violation, 0.28%. This difference in abnormal return is statistically insignificant. Collectively, these findings provide compelling evidence that delinquent filings by politicians are not mere coincidences. Instead, they are deliberate efforts to suppress information signals embedded in their trades. Overall, evidence suggests politicians strategically violate the STOCK Act for financial gains, exploiting private information.

Next, we examine factors influencing politicians' filing violations and potential insider trading. We explore individual traits such as age, gender, tenure, political affiliation, financial literacy, and their potential influence on filing violations. Age is found to be negatively related to filing violations; the negative relation is significant at 1% for purchase transactions. Female politicians' trades exhibit fewer violations than their male counterparts. Tenure is found to be positively related to reporting violations. We also explore the impact of political party affiliation on the violation of the STOCK Act reporting requirements. Our results show that Republican politicians trades are more likely to violate these requirements relative to Democrats or Independents. Specifically, a Republican party member corresponds to a 16.3% higher likelihood of reporting violations on purchase transactions and 15% higher on sales transaction compared to trades made by the Democratics or Independents, after controlling for firm-level and trade level characteristics.

We also explore the effect of academic education in business and finance on reporting violations and abnormal returns. We find a weak correlation between a politician’s academic

education in business and finance and their likelihood of reporting violations. However, we find a positive effect of such educational background on abnormal returns. Senators with higher levels of academic education in business and finance have significantly higher abnormal returns.

Our study makes significant contributions in several key areas. First, the paper contributes to the insider trading literature by examining whether politicians' filing violations stem from intentionally exploiting private information for financial gains or unintentional oversights. This enhances our understanding of the prevalence and nature of filing violations committed by politicians. By showing politicians' filing violations are deliberate efforts to hide information signals, this study provides evidence of insider trading, which is challenging to detect.

Second, this study contributes to understanding insider trading behavior by studying the potential link between politicians' traits such as age, gender, tenure, party affiliation, and financial literacy with their insider trading tendencies and filing violations. Accordingly, the paper highlights the need for increased transparency and accountability in government by finding evidence of deliberate violations.

Third, the paper raises ethical concerns about conflicts of interest and abuse of power, draws attention to these concerns, and sparks further discussion and debate.

Fourth, the paper adds to the literature on market efficiency by identifying an additional source of market inefficiency. This finding expands our understanding of how markets may fail to be efficient and highlights the need for further research and potential policy interventions to address this issue.

Fifth, this paper guides regulatory measures by presenting important policy recommendations regarding the enforcement and strengthening of the STOCK Act reporting

requirements to prevent corruption and promote transparency in government. Finally, this paper contributes to the limited literature on congressional insider trading and literature on ethics and corruption in governments and, accordingly, will inspire new research questions related to the topic.

The study closest to ours is Cline and Houston (2023), which investigates corporate insider trades that violate the SOX reporting deadline. However, our paper differs in several significant aspects. Firstly, Cline and Houston (2023) focus on corporate insiders, whereas our study centers on politicians to examine insider trading activities. Secondly, unlike their study, our study delves into understanding factors that influence these disclosure violations and insider trading activities by examining how factors such as politicians' personal characteristics and party ideology might play a role in these activities.

2. Background, Literature Review, and Hypotheses Development

Politicians have daily access to private, non-public information, which creates a conflict of interest when they engage in stock trading in companies or industries directly affected by such information. The potential to act on this knowledge may incentivize politicians to withhold disclosure of personal trades and fully exploit such privileged information, leading to potential insider trading. Congress enacted the STOCK Trading on Congressional Knowledge (STOCK) Act on April 4, 2012, to address these concerns, increase transparency, and eliminate conflicts of interest. This federal law mandates that congress members and other government officials publicly and promptly disclose any financial transactions made by them, their spouses, or children above $1000 within 45 days of the transaction to reduce profitable trades based on private information.

Previous research has shown that politicians do have access to privileged information that can be used to make profitable trades. For instance, Ziobrowski, Cheng, Boyd, and Zopbrowski (2004) examine whether U.S. Senators generated abnormal returns by utilizing their informational advantage. They find that the portfolio of stocks purchased by senators generated over 25% Cumulative abnormal return (CAR) in one calendar year after the purchase date.

The study also reveals that a portfolio mimicking strategy, which follows the stock purchases of U.S. senators, outperformed the market by an average of 85 bps per month, while a similar strategy that tracks the sales of senators underperformed the markets by 12 bps per month. Another study by Ziobrowski et al. in 2011 found that synthetic portfolios constructed from the transactions of members of the House of Representatives outperformed the market by 6% between 1985 and 2001. These findings are consistent with existing literature that demonstrates insiders can generate abnormal returns by leveraging their access to private firm information (Jaffe (1974); Damodaran and Liu (1993); Niehaus and Roth (1999); Cohen et al. (2012); Wang et al. (2012); Cline et al. (2017).

Furthermore, politicians may receive information from lobbyists or other sources that could influence their investment decisions. This type of information is typically not available to regular market participants. As a result, other market participants may use the politicians' trades as signals to infer potential future government actions, policy changes, regulations, or other information that could affect the stock prices of specific companies or industries. Politicians' exposure to insider trading can positively impact society by incorporating non-public information into stock prices and enhancing market efficiency. This finding aligns with various studies that suggest that insider trading helps reflect private information into stock prices and contributes to market efficiencies.

Notable studies supporting this notion include Manne (1966), Seyhun (1986), Carlton and Fischel (1982), Meulbroek (1992), Leland (1992), Fishman and Hagerty (1992), and Piotroski and Roulstone (2005).

The rationale behind imposing more stringent disclosure requirements, particularly a shorter discloser window under the STOCK Act, was to reduce information asymmetry and enhance transparency, accountability, and market efficiency. The objective was to aid accurate price discovery and, in turn, restore investor confidence. Numerous studies have demonstrated that a shorter disclosure window enables prompt incorporation of information from trades into the stock price. For instance, Cheng, Nagar, and Rajan (2007) document that while there was an insignificant market reaction for purchases and sales on the trade date, there was a significant decline in stock price on the sales reporting date. These findings suggest that insiders can avoid personal losses by selling shares before the announcement of negative information.

Timely disclosure of insider trades is expected to increase trading volume and stock price reactions because of the valuable information signals contained in such trades, consistent with the findings of Brochet (2010), who document a notable increase in trading volume and abnormal returns in the three days after the reporting of insider buys, and Betzer et al. (2015), who document significant price reactions after the trades were reported. Moreover, Cline and Houston (2023) document that many insiders earn abnormal profits by violating SEC reporting requirements, particularly by submitting open market transactions after the legally mandated deadline. This result provides evidence of intentional filing delay by corporate insiders to conceal information embedded in their trades.

Similarly, Carter, Mansi, and Reeb (2003) measure abnormal returns of insider buys by examining time lags between transaction and report dates. Their findings indicate that insiders who

delay reporting their trades are more likely to realize the most significant abnormal returns. In a similar line of reasoning, we argue that delinquent filings by politicians are not mere coincidences; instead, they represent intentional efforts to prevent information signals embedded in their trades. By purposefully delaying the reporting of their trades, politicians may seek to exploit private information, effectively preventing critical information from becoming known in the market. This strategy enables politicians to trade secretively and avoid market responses until the report dates.

Politicians may delay their disclosures tactically to align their trades with significant market events, such as upcoming legislation or regulatory decisions. This behavior could enable them to capitalize on non-public information. Consequently, we hypothesize that politicians who violate the STOCK Act's reporting requirements are more likely to achieve higher abnormal returns on their stock trades than those who adhere to them.

Given the escalating concerns that politicians may engage in reporting violations and insider trading to exploit private information, it is essential to understand what factors influence their insider trading and transaction reporting decisions. Understanding these factors is crucially essential to combat insider trading and reporting violations.

Existing insider trading literature primarily focuses on institutional factors influencing insider trading decisions and profitability. These factors include quality of corporate governance (Dai et al. (2013), Skaife et al. (2013), firm size, and book-to-market (Seyhan (1986), Lakonishok and Lee (2001)), R&D (Aboody and Lev (2000), Coff and Lee (2003) and corporate corruption culture (Liu 2016). In contrast, other factors influencing politicians' corruption and misconduct documented in the literature include states' education quality, resources, and income inequality (Glaisser and Saks (2006).

However, little focus is given to the politicians' individual-level characteristics and attributes. The potential for engaging in insider trading and reporting violations can also be influenced by whether politicians hold positions on committees that provide them access to sensitive information that is not available to the general investing public thereby creating an information asymmetry. For instance, if a senator serves on the finance committee and gains access to non-public details about an impending merger, they could use that information to trade stocks of the involved companies, potentially resulting in significant financial gains. Politicians may be tempted to use this information to make informed investment decisions, which could lead to higher profits. Furthermore, their ability to influence policy decisions affecting various sectors might incentivize them to advocate for policies favoring their investments.

Numerous media reports have highlighted instances where politicians, especially those serving on Senate committees, violated the STOCK Act reporting requirements. One such report was published in 2022 by Kelly, Playford, and Parlapiano in The New York Times. Their study revealed that from 2019 to 2021, 97 lawmakers or their family members traded financial assets in industries potentially impacted by their legislative committee work. Drawing from these arguments and empirical cases, we hypothesize that politicians occupying committee roles are more prone to violate the reporting requirements of the STOCK Act to exploit private information for their financial gains. Thus, politicians with access to non-public information due to committee involvement are more likely to engage in ethical behaviors like reporting violations and insider trading. Politicians might also find incentive in the small penalty-a standard amount of $200 or waiver by senate officials to violate the STOCK Act disclosure requirements as a venture of low risk and potentially high rewards. They could be more inclined to engage in such conduct if the potential financial gains outweigh the risks of being caught.

3. Data and Methodology

3.1 Sample and Data

Data in this study comes from several sources. The primary data set consists of U.S. politicians' open market transactions in common stocks and options. We have hand-collected these data from the periodic transaction report of the U.S. Senate Financial Disclosures website between April 2012 to December 2022. The U.S. Senate Financial Disclosure data set contains all open market purchases and sales made by the U.S. Senators, their spouses, and dependent children. The database includes the transaction date, filing date, name of the Senators, order type, ticker, and approximate transaction amount.

Politicians' party affiliation, age, gender, and education are hand-collected from U.S. Senate Biography and through Google search. To analyze the impact of politicians' party ideology, we create a dummy variable Republican, which equals one for politicians affiliated with the Republican Party and zero otherwise. We also include politician-specific control variables such as age, female, and tenure. Age refers to the politician's age on the day of the stock transaction. Female is a dummy variable that equals one if the politician is female and zero otherwise. Tenure represents the years a politician has served in the senate office up to the day of the stock transaction.

Politicians possess financial acumen that affects their financial decision-making. Financial acumen largely stems from financial education. Utilizing the methodology outlined by Malmendier and Tate (2008), we create a dummy variable for finance education, *Fin_edu*, which equals one for politicians with undergraduate or graduate degrees in finance, accounting, economics, and business, including an MBA. While *Delay* measures the number of days a politician takes to report a transaction after the stock transaction day.

Then, we merged politician stock transaction data with education data. Next, we merged this politician stock transaction data with CRSP and COMPUSTAT to obtain stock return data and firm-specific variables. We combine multiple same-day transactions by the same insider into a single observation.

We also include firm-specific control variables in our models. Seyhan (1986), Lakonishok and Lee (2001) document that firm size and book-to-market affect profits from insider trading. Consequently, we include both firm size and book-to-market as our controls.

Size is defined as the natural log of a firm's market capitalization. Book-to-Market is the ratio of the book value and market value of a firm's equity. Finnerty (1976) documents that leverage affects insiders' trading decisions. Hence, we also include control variable leverage, which is calculated as the ratio of a firm's total liabilities to its total assets. Moreover, we also control ROA, which is measured by dividing a firm's operating profit by its average total assets.

3.2 Computation of Cumulative Abnormal Returns (CARs)

At first, we compute abnormal returns around each politician's trade. Abnormal return is calculated as the difference between stock and value-weighted index returns, including dividends. Then, we aggregate daily abnormal returns over a 10-day window centered on the transaction dates, yielding the Cumulative Abnormal Returns for each event. Utilizing a market-adjusted model, we calculate the abnormal return in the following way:

$AR_{it} = R_{it} - R_t$ (1)

Where AR_{it}= the abnormal return for firm i on day t

R_{it}= the return for firm i on day t

R_{dt}=the return on CRSP value-weighted index on day t

While Cumulative Abnormal Return (CAR) is calculated in the following way:

$CAR_{i,x:y} = \sum_{t=x}^{y} AR_{it}$ (2)

Here $CAR_{i,x:y}$= Cumulative abnormal return for firm i spanning from time x to y.

3.3 Multivariate Analysis

We aim to start our multivariate analysis by investigating whether politician filing violations are associated with cumulative abnormal returns (CARs). For the baseline regression analysis, we utilize the following OLS three-way fixed effects regression models:

$$CAR_{i,t} = \alpha + \beta Violation_{i,t} + \delta Controls_{i,t} + \alpha i + \alpha t + \alpha p + \varepsilon_i \quad (3)$$

Where i indicates firm, t indicates day, and p indicates political Party. The dependent variable is the 10-day CARs. The primary independent variable of interest is a violation, which indicates whether the trade is reported after the STOCK Act mandated deadline.

3.4 Filing Violation, Firm-level, and Politician-Level Characteristics

Figure I illustrate the annual percentage of politician filing violation percentage over the sample period. The violation percentage exhibits a consistent trend. Notably, both purchase and sale violation percentages reduced significantly in 2013 compared to the previous year after the enactment of the STOCK Act. The reduction is more pronounced for purchase violations, which reduced sharply from a staggering sixty percent in 2012 to under twenty percent in 2013. This decline could be attributed to increased caution in reporting transactions due to heightened scrutiny after the STOCK Act's implementation in 2012.

[Insert Figure I here]

Furthermore, increased awareness of potential penalties and legal implications may have prompted many politicians to file their stock trades promptly and diligently. However, following a year of improved compliance, some politicians might have grown less diligent in their reporting practices, possibly driven by a perception of a lack of enforcement and penalties for violations. This lax behavior potentially led to an upsurge in filing violations in 2014. Subsequently, repeated media coverage of politicians violating the STOCK Act has made politicians more vigilant, gradually reducing violations.

Table 1 presents sample statistics of firm-level and trade-level characteristics. Panel A shows the descriptive statistics for firm-level characteristics and panel B for trade-level characteristics. The mean level of market capitalization of sample firms is 10.34, indicating that, on average, politicians trade stocks of larger firms. The average leverage ratio of sample firms is 0.29, indicating that, on average, the firms whose stocks politicians trade have a higher amount of equity relative to total debt. The mean book-to-market ratio of the sample firms is 0.41, which suggests the market pays $2.43 for each dollar of their net assets. Thus, the stocks Senators trade tend not to be value stocks. The average ROA of the sample firms is 24%, which indicates that, on average, the sample firms generate a 24% return on their total assets.

[Insert Table 1 here]

Panel B of Table I shows that the average politician's age at the time of transactions is around 66 years. The average tenure is 10.01 years, representing the politicians on an average served around 10 years in the senate office before the day of stock transactions. The average delay of 135.31 suggests that the average reporting days of politicians' trades are 135, much higher than the 45 days that the STOCK ACT mandated. The average transaction amount of politicians' trades is $24,196. At the same time, the average 10-day CAR is 0.21%.

Table 2 presents politician filing violation statistics. Panel A shows politicians' tendency to miss the STOCK Act filing deadline. 37.79% of the politicians' reported trades are filed after the required deadline of 45 days. 42.90% of reported purchase trades and 32.37% of the reported sales trades are filed after the required deadline. A significantly higher percentage of purchase violations than sale violations is consistent with prior literature, which has documented that insider sales occur for various reasons, such as rebalancing, liquidity, and diversification (Seyhun (1986); Lakonishok and Lee (2001); Cohen, Malloy, and Pomorski (2012)).

[Insert Table 2 here]

Panel B of Table II shows that Republican politicians' violations (42.92%) are around twice those of Democrat politicians (21.00%).

4. Empirical Results

4.1 Univariate Tests

We begin by testing our hypothesis that politicians who violate the STOCK Act's reporting requirements are more likely to achieve higher abnormal returns on their stock trades than those who adhere to them. Table 3 presents univariate results, which report the mean of the 10-day cumulative abnormal returns (CARs) of violation and non-violation politicians' trades and their differences. T-test is used to investigate whether the mean of CARs significantly differs between violation and non-violation politicians.

[Insert Table 3 here]

The results suggest that the mean 10-day cumulative abnormal returns (CARs) around politician purchases are significantly higher for violation than non-violation. Specifically, politician purchases linked to violations of reporting requirements earn a cumulative abnormal

return (CARs) of 0.31%, which is 0.33% higher than that of politician purchases that adhered to reporting requirements (-0.02%). These results are both statistically and economically significant.

These findings provide evidence that politicians who report late earn significantly higher abnormal returns on purchases, suggesting that the occurrence of delinquent filings by politicians is not random; instead, it reflects intentional action aimed at concealing information rooted in their trades. Thus, politicians strategically violate the reporting requirements to exploit private information for financial gains. For sale transactions, politician sales associated with violations of reporting requirements earn a CAR of 0.37%, and sales adhering to reporting requirements earn a CAR of 0.28%. This result implies that the stock prices did not fall after the politician sales for violation and non-violation sales.

Moreover, the difference between violation and non-violation sales is statistically insignificant. These findings are consistent with prior literature, which documents that insider sales are uninformative since they occur for various reasons, such as rebalancing, liquidity, and diversification (Seyhun (1986); Lakonishok and Lee (2001); Cohen, Malloy, and Pomorski (2012)).

Table 4 shows the univariate results on the violations and value-weighted average abnormal returns for trades made by the Republican politicians compared to those made by non_Republican politicians.

[Insert Table 4 here]

The results indicate that both purchase and sale transactions made by the Republican politicians show significantly higher reporting violations than such trades made by non_Republican politicians. Specifically, purchase trades by Republican show 28.78% higher violation than purchase trades made by the non_Republican while sale transaction exhibit 14.43%

higher violation for Republican politicians. However, panel B of Table 4 shows Republican earn -0.34% abnormal return on purchase transactions compared to non_Republican politicians.

4.2 Multivariate Tests

Next, we utilize multivariate regression with the dependent variable as a violation, indicating whether the trade is reported after the STOCK Act mandated deadline.

5. Politicians' Traits, Filing Violations, and Insider Trading Return

5.1 Politician Characteristics and Filing Violations.

After finding that politicians' filing violations are deliberate attempts to conceal and exploit private information for personal financial gains, we explore whether politicians' attributes influence their filing violations and insider trading decisions. First, we explore certain trade-level and firm-level factors and examine whether these factors influence filing violation decisions by politicians. The results are reported in Table 5.

[Insert Table 5 here]

Concerning purchases, the coefficients on Age are negative and significant at a 1% level in all three specifications, indicating that older politicians are associated with a slightly lower likelihood of being involved in filing violations than relatively younger politicians. Specifically, the coefficient of -0.013 under model 3 suggests that holding all other factors constant, for a year increase in age of politicians, the probability of a filing violation of purchases decreases by approximately 1.3%. The coefficients of Female are negatively related to filing violations of purchase transactions, which indicates that filing violation tendencies are less among female politicians than among male politicians. For sales, almost all the coefficients are insignificant. The coefficient of Tenure indicates a positive relationship between the length of time a senator

holds office and the stock trade reporting violations. In other words, senators with longer tenures have higher frequencies of reporting violations relative to shorter-serving senators.

Next, we conduct multivariate analysis to explore whether political party affiliation affects the probability of reporting violations by politicians. Party affiliation can shape the ideological and ethical behavior of politicians. We create a dummy variable Republican, which equals 1 if the politicians belong to the Republican Party and zero for politicians from other parties. The linear probability regression results are reported in Table 6.

[Insert Table 6 here]

The coefficients of the independent variable Republican are positive and statistically significant under all three specifications, suggesting trades of politicians belonging to the Republican Party are positively related to filing violations compared to those of the Democratic and independent parties. For instance, the coefficients of Republican under model 3 is 0.163, which indicates that when Republican politicians do the trade, the probability of reporting violations increases by 16.3% compared to when a trade is made by a democratic or independent party politician. This coefficient is statistically significant at the 5% level.

5.2 Decoding Information: Trading Derivative Securities vs. Stocks

Finally, we explore trading performance in derivative securities, with a specific focus on options and stocks, to get insights into whether politicians strategically leverage their positions to make personal profits through option trading instead of traditional stock trades. We hypothesize that politicians with access to privileged non-public information will be more inclined to engage in option trading rather than stock trading to optimize their gains. Consequently, we anticipate higher abnormal returns from options trading than stock trading.

Politicians' option trading data are contained in financial disclosure reports, which we analyze to decode the informativeness. The univariate results are reported under Table 7. Panel A shows a significantly lower violation percentage associated with trades of derivative securities compared to trades of stocks. However, results from panel B of Table 7 indicate that trading derivative securities generated greater return than simply buying long stocks. This difference in abnormal return is statistically significant at 5%.

[Insert Table 7 here]

Consistent with the univariate results from table 7, multivariate results in table 8 suggest significantly lower violation likelihood for trading derivative securities compared to trading underlying stocks. The multivariate results are reported in Table 8.

[Insert Table 8 here]

Next, we explore the effect of derivative trades on abnormal returns. The results are reported in Table 9. We obtain positive significant return for derivatives for purchases transactions under all three specifications. That indicates that derivatives securities trading is associated with positive abnormal returns. For instance, the coefficient of Derivatives under model 2 is 0.0065, which indicates that, when politicians trade a derivative security, there is 0.65% increase in abnormal returns.

[Insert Table 9 here]

The coefficient of interaction term Derivatives*violation suggests a larger positive impact on abnormal returns compared to the individual effect of Derivatives alone. That means, politicians earn bigger abnormal returns when they trade derivative securities and delay their reporting compared to the derivatives alone. Concerning sales transactions, the coefficients of Derivative are negative in all three specifications under columns 4,5, and 6, with coefficients significantly

negative under models 4 and 5. Specifically, the coefficient under model 5 is -0.0108, which indicates politicians avoid losses or, in other words, make 1.56% abnormal returns by shorting stocks through option contracts. The coefficients of interaction terms under all specifications are even higher than those of derivative only. This suggests that when senators trade options and delay their reporting beyond the required deadline of 45 days, it significantly influences cumulative abnormal returns.Politicians' financial education could affect reporting violations and contribute significantly to abnormal returns. We explore whether politicians' academic education in specific fields such as finance, business, economics, or accounting influences reporting violations and their abnormal returns from their stock investments. We explore whether finance education affects politicians' reporting violations. The results are reported in Table 10.

[Insert Table 10 here]

The primary independent variable of interest is Fin_edu, a dummy variable equal to one for politicians with undergraduate and graduate degrees in finance, business, economics, or accounting, and zero otherwise. For purchases, the coefficients of Fin_edu under all three specifications are positive but insignificant. This implies politicians with finance education have higher likelihood of reporting violations, but this inclination is not strong enough to be considered statistically significant. The possible effect of politician academic education in finance on abnormal returns are analyzed. The results are reported in Table 11.

[Insert Table 11 here]

The coefficients for purchase transactions are positive. These coefficients are both statistically and economically significant. The coefficient of Finance education under column 3 is 0.0121, which implies that politicians with prior education in finance generate 1.21% abnormal

returns since politicians are more likely to make investment decisions positively impacted by prior finance education.

6. Limitations of the study

Partial observability: Our knowledge of financial reporting violations comes almost exclusively from the politicians who reported, and the characteristics of those politicians may differ from politicians who are violating but have not reported their stock transactions. We never know that the actual extent of reported violation may even be more significant than the paper reports/or may be lower if the unreported trades do not constitute reporting violations.

This paper uses financial disclosure data compiled based on reports submitted by politicians. If they made a mistake in reporting, the biased data might prevent us from knowing the actual magnitude of violations. Besides, since all the data, excluding stock return data of CRSP and firm financial data from COMPUSTAT, are hand collected, the results may be subject to unintentional wrong input.

7. Conclusions

In this study, we examine whether U.S. politicians intentionally violate the reporting requirements of the STOCK Act to hide and leverage private information contained in their trades for personal financial gain. The results indicate that many politicians intentionally violate the Act to reap personal benefits, thus challenging the ethical and legal norms. The concern of politicians generating an unfair advantage in the stock market due to private information access adds complexity to the issue. The study seeks to determine whether such filing violations by U.S. politicians are inadvertent oversight or deliberate misconduct to secure their financial advantages. By exploring the incentives and ramifications of such violations, this study contributes to

deepening our understanding of challenges in maintaining transparency, fairness, and accountability in political finance.

The empirical analysis reveals that a significant number of politicians violate the STOCK Act 2012 reporting requirements. Findings reveal that 37.79% of reported trades of politicians are filed after the required deadline of 45 days, mandated by the STOCK Act 2012. Importantly, these delinquent filings are not mere coincidences but deliberate efforts to conceal and leverage private information in their trades. Notably, politicians with such filing violations realize 0.33% higher abnormal returns in purchases over 10 days after their transactions.

The paper also explores whether politicians' attributes affect their stock trade reporting violations and insider trading decisions. The results suggest several vital associations. Older politicians are slightly less likely to be involved in the STOCK Act reporting violations than their younger counterparts. Female politicians tend to exhibit a lower tendency for the STOCK Act reporting violations compared to their male counterparts. Senators with longer tenures in office tend to have higher frequencies of violations when compared to senators with shorter tenures in office. While exploring the potential influence of political ideology, we find that Republican senators have a 16.3% higher likelihood of committing reporting violations when compared to trades made by politicians from Democratic or Independent parties. Furthermore, the paper explores the influence of senators' prior academic education in finance, business, economics, or accounting on their stock trading decisions. It finds that senators with such education generate higher abnormal returns, suggesting a positive influence on investment decisions arising from their academic education in those fields. The paper also sheds light on the politicians' trading performance in derivative securities relative to traditional stocks. The results suggest that politicians engaging in derivative securities, particularly options, earn significantly higher

abnormal returns compared to those trading stocks. This might imply that politicians strategically leverage their positions to make personal profits through option trading instead of traditional stock trades.

Overall, the paper establishes that delinquent filings by politicians are not mere chances but deliberate efforts to conceal and exploit private information in their trades. Politicians' attributes shape their tendencies toward reporting violations. The findings suggest that the STOCK Act failed to combat insider trading by politicians. Stricter enforcement is needed beyond mere legislative enactment to restore trust in the government, protect the interests of the American people, and maintain confidence in financial markets.

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Appendix: Variable Description

Variable	Definition
Violation	Dummy variable taking the value of one when a stock transaction is reported after the required deadline of 45 days, as mandated by the STOCK Act, and zero otherwise.
Republican	A dummy taking the value of one for politicians affiliated with the Republican Party and zero otherwise.
Size	The natural logarithm of market capitalization of a firm.
Leverage	The ratio of a firm's total liabilities to its total assets.
Book-to-Market	The ratio of the book value and market value of a firm's equity.
ROA	The net profit of a firm divided by its average total assets.
Tenure	The number of years a politician has served in the senate office up to the day of the stock transaction.
Delay	The number of days a politician takes to report a trade after the stock transaction date.
Female	Dummy variable that equals one if the politician is female and zero otherwise.
CAR(0,+10)	The ten-day value weighed cumulative abnormal returns after transactions.
Derivative	Dummy taking the value of one when politicians' financial transactions involve derivative securities based on underlying stocks and zero otherwise.
Derivative*violation	The interaction term between Derivative and Violation.
Fin_edu	Dummy taking the value one for politicians with undergraduate or graduate degrees in finance, business, economics, or accounting and zero otherwise.

Figure 1
Politician Filing Violations Percentage by Year

Figure 1 illustrates the percentage of politician trades reported after the legal deadline for each year from 2012 to 2022. The violation percentage is computed by combining all politician violations annually for purchases and sales, then comparing them to the total politician purchases and sales for each corresponding year. The x-axis represents the reporting year of transactions, while the y-axis represents the percentage of trades violating the reporting deadline. The year for the

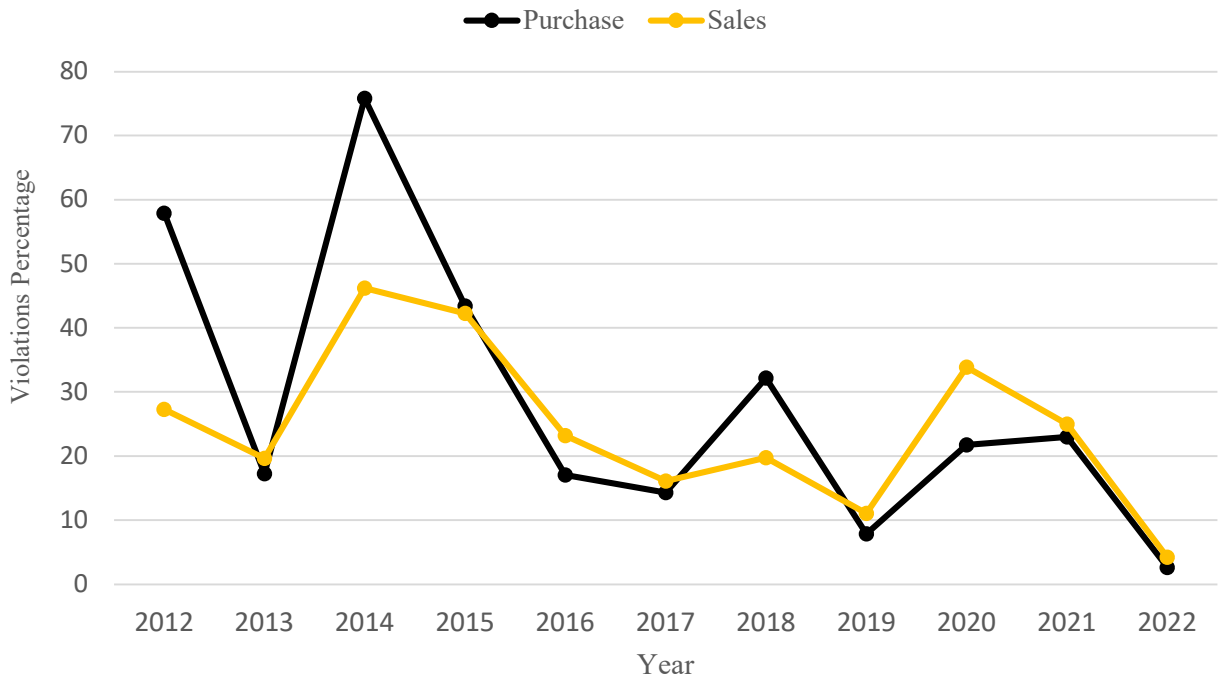

Table 1
Sample Statistics

This table presents an overview of the sample used in this paper. *Size* is defined as the natural log of a firm's market capitalization. *Leverage* is calculated as the ratio of a firm's total liabilities to its total assets. *Book-to-Market* is the ratio of the book value and market value of a firm's equity. *ROA* is measured by dividing a firm's operating profit by its average total assets. Panel B presents trade-level characteristics. *Age* refers to the politician's age on the day of the stock transaction. *Tenure* represents the years a politician has served in the senate office up to the day of the stock transaction. *Delay* measures a politician's days to report a transaction after the stock transaction day. *The transaction amount* is the value of each stock transaction the politician makes. *CAR(0,+10)* are ten-day value-weighted cumulative abnormal returns after purchase and sale transactions, respectively.

	Mean	Median	SD	25th	75th
Panel A: Firm-Level Characteristics					
Size	10.34	10.30	1.70	9.13	11.65
Leverage	0.29	0.28	0.19	0.17	0.40
Book-to-Market	0.41	0.33	0.91	0.16	0.60
ROA	0.24	0.12	5.08	0.07	0.17
Panel B: Trade-Level Characteristics					
Age	65.83	65.37	7.02	61.56	69.40
Tenure	10.01	7.17	9.35	3.93	12.73
Delay	135.31	31.00	190.18	18.00	153.00
Transaction Amount	24,196	8,000	57,502	8,000	8,000
CAR(0,+10)	0.21%	0.18%	6.48%	-2.35%	2.77%

Table 2
Politician Filing Violation Statistics

This table presents relevant information about the STOCK Act 2012 reporting violations in the sample data used in this paper. Panel A contains information regarding the total number of politician trades and violations categorized by transaction type. The first column presents the total number of trades, the second column presents the number of trades that violate the filing requirement, and the third column presents the violation percentage. Panel B presents filing violations categorized by party affiliation. Violations are reported to be transactions that were filed after the required deadline of 45 days, as mandated by the STOCK Act 2012.

	Total Trades	Violations	Violation %
Panel A: Totals			
All Transactions	14,743	5,488	37.79%
Purchases	7,597	3,259	42.90%
Sales	7,146	2,229	32.37%
Panel B: By Party Affiliation			
Republican	11,296	4,848	42.92%
Non-Republican	3,447	724	21.00%

Table 3
Abnormal Returns: Violation vs non-Violation

This table presents the univariate results of the value-weighted average abnormal returns for filing violation transactions compared to non-violation transactions categorized by transaction type. The table reports 10-day abnormal returns after politician transactions for filing violations, contrasting them with non-violation transactions. *Violation* is a dummy which equals one when a stock transaction is reported after the required deadline of 45 days, as mandated by the STOCK Act, and zero otherwise. The difference in returns between the two groups is presented in the last column, with standard deviations in parentheses. T-statistics are reported within brackets. Stars indicate significance levels in the first two columns, denoting the statistical significance of returns from zero. In the third column, stars represent the significance of the difference in abnormal returns between the two groups. Specifically, ***, **, and * denote significance at 1%, 5%, and 10%, respectively.

Violations vs. non-Violations (0,10)

	Violations		Non-Violations		Difference
	N	Abnormal Return	N	Abnormal Return	Abnormal Return
Purchases	3,259	0.31%***	4,338	-0.02%	0.33%**
		(0.06)		(0.07)	[2.09]
Sales	2,313	0.35%***	4,833	0.28%***	0.07%
		(0.06)		(0.06)	[0.45]

Table 4
Violations and Abnormal Returns: Republican vs non-Republican

This table presents univariate results of the violations and value-weighted average abnormal returns for Republican compared to non-republican. Republican is a dummy taking the value of one for politicians affiliated with the Republican Party and zero otherwise. Panel A reports the comparison of violations between Republican and non-Republican politicians. The difference in violation between the two groups is reported in the last column. Panel B reports the comparison of abnormal returns between Republican and non-Republican politicians. The difference in returns between the two groups is presented in the last column, with standard deviations in parentheses. Stars indicate significance levels in the first two columns, denoting the statistical significance of returns from zero. In the third column, stars represent the significance of the difference in abnormal returns between the two groups. Specifically, ***, **, and * denote significance at 1%, 5%, and 10%, respectively.

Panel A: Violations

	Republican		Non-Republican		Difference
	N	Violation	N	Violation	Violation
Purchases	5,777	50.05%***	1,820	21.26%***	28.78%***
Sales	5,519	35.81%***	1,627	21.37%***	14.43%***

Panel B: Abnormal returns

CARs(0,10)	Republican		Non-Republican		Difference
	N	Abnormal Return	N	Abnormal Return	Abnormal Return
Purchases	5,777	0.04%	1,820	0.38%*	-0.34%*
Sales	5,519	0.29%***	1,627	0.36%**	0.07%

Table 5
Filing Violation Determinants

This table presents linear probability models with violation as the dependent variable taking a value of one if the trade violates the STOCK ACT 2012 reporting requirement and zero otherwise. Age refers to the politician's age on the day of the stock transaction. Female is a dummy variable that equals one if the politician is female and zero otherwise. Tenure represents the years a politician has served in the senate office up to the day of the stock transaction. Size is defined as the natural log of the market capitalization of a firm. Leverage is calculated as the ratio of a firm's total liabilities to its total assets. Book-to-Market is the ratio of the book value and market value of a firm's equity. ROA is measured by dividing a firm's operating profit by its average total assets. Year-fixed effects, firm-fixed effects, and party-fixed effects are controlled in all specifications. State-clustered robust standard errors are reported in parentheses. ***, **, and * denote significance at 1%, 5%, and 10%, respectively.

	Purchases			Sales		
	Violation	Violation	Violation	Violation	Violation	Violation
	(1)	(2)	(3)	(4)	(5)	(6)
Age	-0.009***	-0.017***	-0.013***	-0.001	-0.005	-0.004
	(0.004)	(0.008)	(0.007)	(0.004)	(0.005)	(0.005)
Female		-0.148	-0.122**		-0.007	-0.001
		(0.057)	(0.0571)		(0.079)	(0.076)
Tenure		0.004	0.002		0.004	0.003
		(0.003)	(0.003)		(0.003)	(0.003)
Size			0.017			0.013
			(0.031)			(0.022)
Leverage			0.092			0.208
			(0.081)			(0.141)
Book-to-Market			-0.062			0.073
			(0.064)			(0.074)
ROA			0.004			0.329*
			(0.013)			(0.185)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Party FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	1.078***	1.520***	1.018**	0.420*	0.637**	0.269
	(0.284)	(0.475)	(0.378)	(0.220)	(0.308)	(0.353)
Observations	7,329	7,329	4,244	6,926	6,926	4,114
Adj. R-squared	0.383	0.426	0.419	0.119	0.144	0.142

Table 6
Politician Party Affiliation and Filing Violation

This table presents the results of linear probability models with *Violation* as the dependent variable taking a value of one when a stock transaction is reported after the required deadline of 45 days mandated by the STOCK Act, and zero otherwise. Republican is a dummy taking the value of one for politicians affiliated with the Republican Party and zero otherwise. *Age* refers to the politician's age on the day of the stock transaction. *Female* is a dummy taking the value of one when the stock transaction is made by a female politician and zero otherwise. *Tenure* indicates the number of years a politician has served in the senate office up to the date of the stock transaction. *Size* is defined as the natural log of a firm's market capitalization. *Leverage* is calculated as the ratio of a firm's total liabilities to its total assets. Book-to-Market is the ratio of the book value and market value of a firm's equity. *ROA* is measured by dividing a firm's net profit by its average total assets. Year fixed effects and firm fixed effects are controlled in all specifications. State clustered robust standard errors are reported in parentheses. ***, **, and * denote significance at 1%, 5%, and 10%, respectively.

	Purchases			Sales		
	Violation	Violation	Violation	Violation	Violation	Violation
	(1)	(2)	(3)	(4)	(5)	(6)
Republican	0.127**	0.168**	0.163**	0.114**	0.146***	0.150***
	(0.054)	(0.065)	(0.067)	(0.053)	(0.048)	(0.045)
Age		-0.017**	-0.013*		-0.005	-0.004
		(0.008)	(0.007)		(0.005)	(0.006)
Female		-0.148**	-0.122**		-0.007	-0.002
		(0.057)	(0.057)		(0.079)	(0.076)
Tenure		0.0046	0.003		0.004	0.003
		(0.003)	(0.003)		(0.003)	(0.003)
Size			0.017			0.013
			(0.031)			(0.022)
Leverage			0.092			0.208
			(0.081)			(0.141)
Book-to-Market			-0.062			0.073
			(0.064)			(0.074)
ROA			0.004			0.329*
			(0.013)			(0.185)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.331***	1.392***	0.896**	0.239***	0.524	0.153
	(0.026)	(0.451)	(0.378)	(0.042)	(0.312)	(0.360)
Observations	7,329	7,329	4,244	6,926	6,926	4,114
Adj. R-squared	0.406	0.426	0.383	0.142	0.144	0.119

Table 7
Violations and Abnormal Returns: Derivative vs Stocks

This table reports the univariate results of violations and value-weighted average abnormal returns associated with politicians' trading of derivative securities based on underlying stocks versus stocks. Panel A reports the comparison of violations associated with politicians' trading of derivative securities versus stocks. The difference in violation between the two groups is reported in the last column. Panel B reports the comparison of abnormal returns between Derivative securities and Stocks. The difference in returns between the two groups is presented in the last column. Stars indicate significance levels in the first two columns, denoting the statistical significance of returns from zero. In the third column, stars represent the significance of the difference in abnormal returns between the two groups. Specifically, ***, **, and * denote significance at 1%, 5%, and 10%, respectively.

Panel A: Violations

	Derivative		Stocks		Difference
	N	Violation	N	Violation	Violation
Purchases	165	11.51%***	8,040	43.84%***	-32.33%***
Sales	179	4.46%***	7,541	33.20%***	-28.74%***

Panel B: Abnormal returns

CARs(0,10)	Derivative		Stocks		Difference
	N	Abnormal Return	N	Abnormal Return	Abnormal Return
Purchases	154	1.27%**	7,443	0.09%	1.18%**
Sales	172	0.65%	6,974	0.29%***	0.36%

Table 8
Violations: Derivatives vs Stocks

This table presents the results of linear probability models with *Violation* as the dependent variable taking a value of one when a stock transaction is reported after the required deadline of 45 days mandated by the STOCK Act, and zero otherwise. *Derivative* is a dummy taking the value of one when politicians' financial transactions involve derivative securities based on underlying stocks and zero otherwise. *Age* refers to the politician's age on the day of the stock transaction. *Female* is a dummy taking the value of one when the stock transaction is made by a female politician and zero otherwise. *Tenure* indicates the number of years a politician has served in the senate office up to the date of the stock transaction. *Size* is defined as the natural log of a firm's market capitalization. *Leverage* is calculated as the ratio of a firm's total liabilities to its total assets. Book-to-Market is the ratio of the book value and market value of a firm's equity. *ROA* is measured by dividing a firm's net profit by its average total assets. Year fixed effects, firm fixed effects and party fixed effects are controlled in all specifications. State clustered robust standard errors are reported in parentheses. ***, **, and * denote significance at 1%, 5%, and 10%, respectively.

	Purchases			Sales		
	Violation	Violation	Violation	Violation	Violation	Violation
	(1)	(2)	(3)	(4)	(5)	(6)
Derivative	-0.009***	-0.017***	-0.013***	-0.001	-0.005	-0.004
	(0.004)	(0.008)	(0.007)	(0.004)	(0.005)	(0.005)
Age						
Female		-0.148	-0.122**		-0.007	-0.001
		(0.057)	(0.0571)		(0.079)	(0.076)
Tenure		0.004	0.002		0.004	0.003
		(0.003)	(0.003)		(0.003)	(0.003)
Size			0.017			0.013
			(0.031)			(0.022)
Leverage			0.092			0.208
			(0.081)			(0.141)
Book-to-Market			-0.062			0.073
			(0.064)			(0.074)
ROA			0.004			0.329*
			(0.013)			(0.185)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Party FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	1.078***	1.520***	1.018**	0.420*	0.637**	0.269
	(0.284)	(0.475)	(0.378)	(0.220)	(0.308)	(0.353)
Observations	7,329	7,329	4,244	6,926	6,926	4,114
Adj. R-squared	0.383	0.426	0.419	0.119	0.144	0.142

Table 9
Abnormal Returns: Derivatives vs Stocks and Interaction with Violations

This table presents the OLS regression results with CAR (0,10) as the dependent variable. *Derivative* is a dummy taking the value of one when politicians' financial transactions involve derivative securities based on underlying stocks and zero otherwise. *Violation* is a dummy which equals one when a stock transaction is reported after the required deadline of 45 days mandated by the STOCK Act, and zero otherwise. Derivative*violation is the interaction between derivative and violation. *Age* refers to the politician's age on the day of the stock transaction. *Female* is a dummy taking the value of one when the stock transaction is made by a female politician and zero otherwise. *Tenure* indicates the number of years a politician has served in the senate office up to the date of the stock transaction. *Size* is defined as the natural log of a firm's market capitalization. *Leverage* is calculated as the ratio of a firm's total liabilities to its total assets. Book-to-Market is the ratio of the book value and market value of a firm's equity. *ROA* is measured by dividing a firm's net profit by its average total assets. Year fixed effects and firm fixed effects are controlled in all specifications. State clustered robust standard errors are reported in parentheses. ***, **, and * denote significance at 1%, 5%, and 10%, respectively.

	Purchases			Sales		
	CAR(0,10)	CAR(0,10)	CAR(0,10)	CAR(0,10)	CAR(0,10)	CAR(0,10)
	(1)	(2)	(3)	(4)	(5)	(6)
Derivative	0.0065***	0.0065**	0.0029	-0.0097*	-0.0108**	-0.0084
	(0.0021)	(0.0025)	(0.0034)	(0.0048)	(0.0051)	(0.0075)
Derivative*violation	0.0470***	0.0470***	0.0167***	-0.0283***	-0.0285***	-0.0414***
	(0.0081)	(0.0080)	(0.0466)	(0.0061)	(0.0061)	(0.0044)
Age		0.0001	0.0003		0.0002**	0.0001
		(0.0002)	(0.0002)		(0.0001)	(0.0002)
Female		0.0004	0.0023		-0.0041	-0.0008
		(0.0038)	(0.0039)		(0.0033)	(0.0038)
Tenure		-0.0001	-0.0003**		-0.0001**	0.0001
		(0.0001)	(0.0001)		(0.0001)	(0.0001)
Size			-0.0064			-0.0017
			(0.0081)			(0.0101)
Leverage			-0.0573***			-0.0434*
			(0.0185)			(0.0222)
Book-to-Market			-0.0462**			-0.0279
			(0.0203)			(0.0199)
ROA			0.0004			-0.0051
			(0.0006)			(0.0452)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Party FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.0007	-0.0010	0.0803	0.0033***	-0.0102	0.0393
	(0.0008)	(0.0130)	(0.0814)	(0.0006)	(0.0072)	(0.108)
Observations	7,325	7,325	4,243	6,923	6,923	4,114
Adj. R-squared	0.274	0.273	0.277	0.149	0.150	0.121

Table 10
Finance Education and Filing Violation

This table presents the results of linear probability models with *Violation* as the dependent variable taking a value of one when a stock transaction is reported after the required deadline of 45 days mandated by the STOCK Act, and zero otherwise. Fin._edu is a dummy variable that equals one for politicians with undergraduate or graduate degrees in finance, business, economics, or accounting and zero otherwise. *Age* refers to the politician's age on the day of the stock transaction. *Female* is a dummy taking the value of one when the stock transaction is made by a female politician and zero otherwise. *Tenure* indicates the number of years a politician has served in the senate office up to the date of the stock transaction. *Size* is defined as the natural log of a firm's market capitalization. *Leverage* is calculated as the ratio of a firm's total liabilities to its total assets. Book-to-Market is the ratio of the book value and market value of a firm's equity. *ROA* is measured by dividing a firm's net profit by its average total assets. Year-fixed effects, firm-fixed effects, and party-fixed effects are controlled in all specifications. State-clustered robust standard errors are reported in parentheses. ***, **, and * denote significance at 1%, 5%, and 10%, respectively.

	Purchases			Sales		
	Violation	Violation	Violation	Violation	Violation	Violation
	(1)	(2)	(3)	(4)	(5)	(6)
Fin_edu	0.080	0.020	0.035	0.008	-0.025	-0.051
	(0.071)	(0.089)	(0.077)	(0.072)	(0.060)	(0.075)
Age		-0.017*			-0.006	-0.006
		(0.008)			(0.006)	(0.006)
Female		-0.154**	-0.140*		-0.006	-0.010
		(0.068)	(0.069)		(0.104)	(0.096)
Tenure		0.004	0.002		0.004	0.004
		(0.003)	(0.003)		(0.003)	(0.003)
Size			0.017			0.016
			(0.031)			(0.025)
Leverage			0.091			0.210
			(0.082)			(0.147)
Book-to-Market			-0.064			0.073
			(0.046)			(0.076)
ROA			0.004			0.325*
			(0.013)			(0.180)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Party FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.418***	1.509***	0.983**	0.326***	0.686**	0.339
	(0.043)	(0.518)	(0.386)	(0.044)	(0.334)	(0.362)
Observations	7,329	7,329	4,244	6,926	6,926	4,114
Adj. R-squared	0.408	0.426	0.383	0.141	0.144	0.121

Table 11
Politician Academic Education and Return

This table presents the OLS regression results with CAR (0,10) as the dependent variable. Fin_edu is a dummy variable that equals one for politicians with undergraduate or graduate degrees in finance, business, economics, or accounting and zero otherwise. *Violation* is a dummy which equals one when a stock transaction is reported after the required deadline of 45 days, as mandated by the STOCK Act, and zero otherwise. *Female* is a dummy taking the value of one when the stock transaction is made by a female politician and zero otherwise. *Tenure* indicates the number of years a politician has served in the senate office up to the date of the stock transaction. *Size* is defined as the natural log of a firm's market capitalization. *Leverage* is calculated as the ratio of a firm's total liabilities to its total assets. Book-to-Market is the ratio of the book value and market value of a firm's equity. *ROA* is measured by dividing a firm's net profit by its average total assets. Year-fixed effects, firm-fixed effects, and party-fixed effects are controlled in all specifications. State-clustered robust standard errors are reported in parentheses. ***, **, and * denote significance at 1%, 5%, and 10%, respectively.

	Purchases			Sales		
	CAR(0,10)	CAR(0,10)	CAR(0,10)	CAR(0,10)	CAR(0,10)	CAR(0,10)
	(1)	(2)	(3)	(4)	(5)	(6)
Fin._edu	0.0077*	0.0082*	0.0121***	-0.0009	0.0015	0.0019
	(0.0041)	(0.0044)	(0.0038)	(0.0027)	(0.0029)	(0.0062)
Age		0.0002	0.0005*		0.0003**	0.0002
		(0.0002)	(0.0002)		(0.0001)	(0.0002)
Female		0.0006	0.0019		-0.0037	-0.0006
		(0.0033)	(0.0039)		(0.0035)	(0.0044)
Tenure		-0.0001	-0.0004**		-0.0002***	-0.0001
		(0.0001)	(0.0002)		(0.0001)	(0.0012)
Size			-0.0073			-0.0012
			(0.0080)			(0.0099)
Leverage			-0.058***			-0.0415*
			(0.0177)			(0.0222)
Book-to-Market			-0.0475**			-0.0272
			(0.0200)			(0.0197)
ROA			0.0004			-0.0051
			(0.0006)			(0.0451)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Party FE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.0001	-0.010	0.077	0.0032***	-0.0118	0.0302
	(0.0008)	(0.014)	(0.083)	(0.0008)	(0.0076)	(0.107)
Observations	7,325	7,325	4,243	6,923	6,923	4,114
Adj. R-squared	0.274	0.274	0.279	0.149	0.149	0.120