

Policy-Oriented Long-Term Funds, ETFs, and Market Volatility: Evidence from China

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ABSTRACT

Under the institutional background of promoting long-term funds to enter China's capital market, this paper studies the impact of policy-based long-term funds entering the market through transactional open index funds (ETFs) on stock market volatility and how it works. We used the daily data from 2022 to 2025, and adopted the fixed effect panel regression and event research method. The results show that the net inflow of ETF funds can significantly reduce the market fluctuation the next day, and this effect depends on the situation-it will play a greater role when the market funds are tight. Further analysis shows that the effect of stabilizing the market cannot be completely explained by the better liquidity at the transaction level, but more like a policy signal channel affecting everyone's expectations. This study provides empirical evidence for the conditional effect of policy long-term capital intervention in China's stock market.

Keywords: Exchange-traded funds (ETFs), policy-driven long-term capital, market fluctuation, state dependence, signaling mechanism

1. INTRODUCTION

In the process of deepening the capital market reform in China, policy-oriented long-term funds increasingly regard Exchange-Traded Funds (ETFs) as a "strategic tool" to enter the stock market ^[15]. Unlike we usually buy stocks directly, ETFs has become an important helper for policies to guide the market because of its ability to track indexes, high transparency and convenient trading. However, when the market is in trouble, we still don't know whether this kind of funds will affect the stability of the market if they rush into the market through ETFs, and how it will affect it. There is not much systematic evidence for these problems.

The research on the market function of ETF mainly focuses on providing liquidity and price discovery. Everyone usually regards ETF as a neutral trading tool, but ignores the institutional attributes of the funds behind it. At the same time, the research on the influence of policy-driven capital market mainly focuses on direct intervention or liquidity support, and little attention is paid to the expectation and signal function when they enter indirectly through specific financial instruments. This fragmented research framework is difficult to explain the possible stable market mechanism of policy-oriented ETF capital inflow itself. ^[9]

According to the situation of China's capital market, this paper systematically studies the influence of policy-oriented long-term funds entering the market through ETF on market fluctuation ^[16]. We use the daily data from 2022 to 2025, and adopt the fixed effect panel model and event research method to test the overall stability effect of these funds, their characteristics in different market conditions, and which is more important, liquidity improvement or policy signal transmission.

It is found that the policy-oriented ETF capital inflow has significantly suppressed the market volatility as a whole, especially in the period of tight market liquidity and high risk. Further analysis shows that this stabilizing effect is not mainly achieved by improving the liquidity at the transaction level; It is more in line with a policy signaling mechanism, which can change investors' expectations. This study provides new empirical evidence for understanding the relationship among policy-driven capital, financial instruments and market stability in emerging markets.

2. LITERATURE REVIEW AND HYPOTHESES

Nowadays, most people who study the relationship between ETF and market stability look at it from the perspective of market microstructure. There is a school of thought that ETF can help stabilize asset prices by improving liquidity and price discovery efficiency through arbitrage mechanism ^[2]. However, another school of thought holds that the redemption

and arbitrage activities of ETF may inadvertently amplify the fluctuation of basic assets when the market is tense or liquidity shocks are encountered. This difference shows that the influence of ETF on market stability actually depends on the specific situation.^[1]

Regarding the influence of policy-driven funds on the market, traditional research emphasizes that its function is to relieve market pressure by directly providing liquidity, thus suppressing fluctuations. However, recent studies have paid more and more attention to the signal function of policy intervention. These studies believe that the fact that policy-oriented entities enter the market itself can adjust investors' expectations of the policy bottom line and risk tolerance^[3]. In China's capital market, which is characterized by a large number of retail investors and a high degree of policy recognition, this signaling mechanism may be particularly significant.^[5]

Further research shows that the effect of financial intervention often shows the characteristics of "it depends on the situation"^[12]. When there is a lot of money in the market and everyone is not afraid of risks, the intervention from the outside is actually not very effective; But when the market is in trouble and everyone is nervous, the stabilizing effect of these interventions can be greatly enhanced. Although we know this, the existing research rarely systematically looks at how the long-term funds with policy orientation, when flowing into the market through high-frequency ETFs, its effect and the reason behind it "depend on the situation".

According to the previous analysis, this paper puts forward the following assumptions:

- Hypothesis 1(H1): The policy-oriented long-term capital inflow through ETF has a significant stabilizing effect on the market; Specifically, there is a significant negative correlation between the net inflow of ETF funds and market volatility.
- Hypothesis 2(H2): After controlling the liquidity at the transaction level, the long-term ETF capital flow still significantly inhibits the market volatility, which is mainly achieved through the policy signals that affect investors' expectations.
- Hypothesis 3(H3): The stability effect of policy-oriented ETF inflow is highly dependent on the market state, and this effect will be more obvious when the market liquidity is limited or the risk level rises.

3. RESEARCH DESIGN

3.1 Sample Selection and Data Sources

This study uses the daily data of China A-share market from January 2022 to December 2025 to study the impact of those long-term funds with policy objectives on the market through ETF. The original data comes from Wind and Choice, which are the two most authoritative financial databases in our country, covering ETF transaction data, fund size information and the positions of those policy target funds.

In order to ensure that the research sample is representative and imported from outside, according to the operational characteristics of policy-driven long-term funds and the requirements of experience identification, we set four strict screening criteria to find out policy ETFs:

- (1) This ETF must have been publicly said by the "national team" (that is, Central Huijin Investment Co., Ltd and China Securities Finance Corporation, hereinafter referred to as Central Huijin and CSFC) or other long-term funds with policy background to increase purchases during the period of our research;
- (2) This ETF must always be one of the top ten broad-based stock ETFs with the largest assets in our domestic market, which can reduce the impact caused by inconvenient trading;
- (3) During the period of our research, this ETF must have a complete daily transaction record, and there can be no data missing;
- (4) This ETF must track a core broad-base index of the A-share market, so that it can represent the whole market.

After using these standards, we finally selected seven broad-based ETFs as research samples. Their details are in Table 1.

Table 1 Basic Information of the Sample Policy-Oriented Broad-Based ETFs

ETF Code	ETF Abbreviation	Underlying Index	Inception Date	Size as of the end of 2025 (100 million yuan)
159845.SZ	ChinaAMC CSI 1000 ETF	CSI 1000 Index	2021-03-18	248
563300.SH	Huatai-PineBridge CSI 2000 ETF	CSI 2000 Index	2023-08-25	112
510500.SH	Southern Asset Management CSI 500 ETF	CSI 500 Index	2013-02-06	820
510310.SH	E Fund CSI 300 ETF	CSI 300 Index	2013-03-06	720
510300.SH	Huatai-PineBridge CSI 300 ETF	CSI 300 Index	2012-05-04	1850
510050.SH	ChinaAMC SSE 50 ETF	SSE 50 Index	2004-12-30	950
159919.SZ	Harvest CSI 300 ETF	CSI 300 Index	2012-05-07	680

Note: Size data are sourced from Wind, calculated based on the fund shares and net asset value (NAV) as of December 31, 2025.

The seven sample ETFs are justified to serve as a valid proxy for policy-oriented long-term funds for three key reasons, with all supporting statistics retrieved from the Wind and Choice databases. First, scale representativeness: As of the end of 2025, the aggregated net asset value of the sample ETFs reached 594 billion yuan, accounting for 68.2% of the total scale of China's broad-based equity ETFs and 42.7% of that of all equity ETFs. Policy-oriented fund inflows into the A-share market are highly concentrated in large-cap flagship ETF products, while small-scale ETFs rarely receive policy-driven shareholding increases. Second, policy action observability: All shareholding increase announcements issued by Central Huijin and CSF during 2023–2025 targeted the sample ETFs exclusively, and the shareholding ratio of policy-oriented funds in these ETFs exceeded 30% of their total outstanding shares. This allows the sample to capture the variations in policy-driven interventions to the greatest extent. Third, comprehensive index coverage: The sample tracks the core broad-based indices of China's A-share market covering different market capitalization styles, including the SSE 50 (large-cap blue-chip), CSI 300 (large/mid-cap), CSI 500 (mid-cap), as well as CSI 1000 and CSI 2000 (small-cap). This coverage avoids the estimation bias caused by a single index and reflects the overall characteristics of China's A-share market.

Overall, the sample selection in this study balances representativeness, identifiability and economic significance, and can effectively support the empirical analysis of the market impact of policy-oriented long-term funds entering the market via ETFs.

3.2 Variable Definition and Measurement

Based on the research hypotheses, this section defines the core variables. Their measurement methods and theoretical rationales are summarized in Table 2.

Table 2: Definition and Measurement of Variables

Variable Category	Symbol	Variable Name	Source and Description
Dependent Variable	Market_Vol	Market Volatility [13]	Calculated based on the daily trading data of the CSI 300 Index.
Core Independent Variable	L.Net_Flow	Lagged Net ETF Inflow [12]	Calculated from daily ETF trading data. The price-spread method is used to estimate the direction of intraday capital flows.
Mechanism & Moderating Variables	Turn_over_f	Market Liquidity [8]	Market turnover field from Wind/Choice index data.
	Low_Liquidity	Low Liquidity Dummy	A binary variable calculated based on \$Turnover\$.
Control Variables	Market_Return	Market Return	Calculated from the closing prices of the CSI 300 Index.
	Interest_Rate	Risk-free Rate	Sourced from the Wind Macroeconomic Database.
	Sentiment	Investor Sentiment	Calculated from the basis between stock index futures and spot closing prices.

3.3 Empirical Specification

In order to test the research hypothesis systematically, this paper constructs four complementary models in a unified framework. These models are used to identify the overall stability effect (H1), liquidity transmission mechanism (H2a), state-dependent conditional effect (H3) and policy signal transmission mechanism (H2b) respectively. Our method combines panel regression and event research analysis, so that we can not only capture the systemic impact, but also see the short-term response of the market to specific policy events. Although the dependent variable is at the market level, the difference of intervention intensity and market attention between different ETFs provides an effective basis for us to identify the intervention effect driven by policies.

3.3.1 Baseline Model: Market Stabilizing Effect (H1)

To examine the overall impact of ETF capital inflows on market volatility, we estimate the following panel regression model with ETF fixed effects:

$$Market_Vol_t = \alpha + \beta L.Net_Flow_{i,t-1} + \gamma X_t + \mu_i + \varepsilon_{i,t} \quad (1)$$

Where $Market_Vol_t$ represents the market volatility on the t day; $L.Net_Flow(i, t-1)$ represents the net capital inflow of ETF i in the previous period; X_t is a series of control variables, including market returns, interest rates and investor sentiment. μ_i stands for the fixed effect of ETFs, which is used to control the invariable differences between different ETFs, such as scale, tracking index and trading characteristics; And $\varepsilon_{i,t}$ is the error term.

The coefficient we are most concerned about is β . If β is significantly negative, it means that the policy-based long-term funds flowing in through ETF have stabilized the fluctuation of the whole market, which also supports our hypothesis H1. All regression analysis uses cluster robust standard error, which can deal with heteroscedasticity and sequence-related problems.

3.3.2 Mechanism Model: Liquidity Transmission Path (H2a)

After confirming the stabilizing effect, we then study: does this effect work through the better liquidity at the transaction level? We used a method called intermediary analysis, taking the market turnover rate as the representative of liquidity, and then estimated the following order:

$$Turn_over_{i,t} = \beta_0 + \beta_1 L.Net_Flow_{i,t} + \sum \beta_k Control_{k,i,t} + \mu_i + \varepsilon_{i,t} \quad (2)$$

$$Market_Vol_{i,t} = \gamma_0 + \gamma_1 L.Net_Flow_{i,t} + \gamma_2 Turn_over_{i,t} + \sum \gamma_k Control_{k,i,t} + \mu_i + \varepsilon_{i,t} \quad (3)$$

If the net inflow significantly improves liquidity after adding liquidity variables, and their inhibitory effect on fluctuations is weakened, then the liquidity mechanism is verified. Otherwise, this means that stability is not mainly achieved through the improvement of liquidity at the transaction level.

3.3.3 Moderating Effect Model: Conditional Stability (H3)

Recognizing that the impact of policy-driven long-term capital on the market may depend on the market conditions at that time, we extended the basic model and added the virtual variable of illiquidity state and its interaction with ETF capital flow:

$$Market_Vol_t = \alpha + \beta_1 L.Net_Flow_{i,t-1} + \beta_2 LowLiquidity_t + \beta_3 (L.Net_Flow_{i,t-1} \times LowLiquidity_t) + \gamma X_t + \mu_i + \varepsilon_{i,t} \quad (4)$$

The cross-term coefficient β_3 reflects the "depending on the situation" characteristic of this stabilization. If β_3 is significantly negative, it means that when the market liquidity is poor, ETF capital inflows have a stronger effect on reducing volatility, which supports our hypothesis H3. We also made regression under high liquidity and low liquidity to verify whether this finding is reliable.

3.3.4 Event Study Model: Policy Signaling Path (H2b)

In order to separate the signaling mechanism from the trading mechanism, we chose the typical "National Team" ETF buying event. We set the event window to $[T1, T2]$ and the estimation window to $[T0, T1]$, and use the market model to estimate the normal return:

$$R_t = \alpha + \beta R_{m,t} + \varepsilon_t \quad (5)$$

We then calculate Abnormal Returns (AR) and Cumulative Abnormal Returns (CAR). If after the policy-driven buying, when the market encounters pressure or capital shortage, CAR is obviously positive, and it is much higher than other times, then it means that this kind of capital has stabilized the market by boosting everyone's expectations, which also supports our hypothesis, Hypothesis H2b.

4. EMPIRICAL RESULTS AND ANALYSIS

This chapter examines the impact of long-term capital entering the market through ETFs on market volatility. It sequentially reports descriptive statistics, baseline regression results, mechanism tests and conditional analyses, event study evidence, and robustness checks, thereby systematically testing the research hypotheses proposed in this study.

4.1 Descriptive Statistics and Correlation Analysis

Table 3. Descriptive Statistics of Core Variables

Var	count	mean	sd	min	max
market_vol	6783	1.328	0.777	0.36	8.00
L_net_flow	6363	1388705.677	57330552.018	-2.10e+09	1.54e+09
turnover_rate_f	6783	1.371	0.519	0.60	5.49
low_liquidity	6783	0.492	0.500	0.00	1.00
market_return	6776	0.000	1.131	-7.05	8.48
interest_rate	6783	2.366	0.437	1.59	2.93
sentiment	6783	-0.178	0.463	-3.81	3.55

Table 3 shows the descriptive statistical results of the main variables. The market volatility (Market_Vol) shows an obvious right deviation distribution, and the maximum value is much higher than the average value, which shows that the market volatility during the sample period has the characteristics of occasional concentration. This feature provides a real background for us to study the state dependence of stability effect.

ETF net capital inflow (L_net_flow) also shows a high degree of discreteness and skewness, which indicates that policy-driven long-term capital entering the market is not a conventional phenomenon, but tends to concentrate on a specific market stage.

Table 4. Correlation Matrix of Core Variables

	market_vol	L_net_flow	turnover_rate_f	low_liquidity	market_return	interest_rate	sentiment
market_vol	1						
L_net_flow	-0.0483***	1					
turnover_rate_f	0.509***	0.0441***	1				
low_liquidity	-0.300***	-0.0298*	-0.692***	1			
market_return	0.139***	0.149***	0.191***	-0.171***	1		
interest_rate	0.0783***	-0.0152	-0.417***	0.355***	-0.0536***	1	
sentiment	0.116***	0.0865***	-0.00727	0.0496***	0.169***	0.378***	1

注: *** p<0.01, ** p<0.05, * p<0.1

* p < 0.05, ** p < 0.01, *** p < 0.001

Table 4 gives the correlation matrix of our core variables. The preliminary correlation analysis shows that there is an obvious negative correlation between the net capital inflow of ETF and market volatility, which provides directional evidence for the statement that "capital inflow will inhibit volatility" ^[12] in the later regression results. At the same time, there is an obvious positive correlation between market turnover rate and volatility, which shows that during the period of our study, when trading activities increase, market volatility tends to be greater. This discovery tells us that the liquidity index at the transaction level may reflect the market pressure in a highly volatile environment, rather than the market becoming more stable.

Generally speaking, descriptive statistics and correlation results show that the objects in this study have obvious non-normal characteristics, which supports that we need to do subsequent empirical analysis from the perspective of conditional dependence and state dependence.

4.2 Baseline Regression: Overall Stabilizing Effect of Long-Term Capital Inflows

Table 5. Regression Results (Dependent Variable: market_vol)

	(1)
VARIABLES	market_vol
L_net_flow	-1.04e-09** (4.02e-10)
market_return	0.0994*** (0.00338)
interest_rate	0.0892*** (0.00817)
sentiment	0.143*** (0.0117)
Constant	1.142*** (0.0214)
Observations	6,363
Number of etfs_code	7
R-squared	0.039
Robust standard errors in parentheses	
*** p<0.01, ** p<0.05, * p<0.1	

Table 5 reports the results of baseline regression for testing hypothesis H1. After controlling the market return, risk-free interest rate and investor sentiment, and taking into account ETF and fixed time effect, the coefficient of lagging ETF net capital inflows is significantly negative. This shows that the policy-driven long-term capital entering the market through ETF can significantly inhibit market volatility ^{[10] [13]}.

Although the dependent variable is a measure of market volatility, the difference of capital flow at ETF level reflects the change of cross-sectional intensity of policy capital intervention among different ETFs, thus providing effective information for identifying its impact on the overall market volatility. The estimated coefficients of control variables are also consistent with theoretical expectations, which enhances the reliability of baseline regression results.

4.3 Mechanism Tests and Conditional Heterogeneity Analysis

4.3.1 Test of the Liquidity Transmission Channel

Table 6. Mediation Effect Test of the Liquidity Transmission Path

Variable	(1) Step 1: Y on X (M1)	(2) Step 2: M on X (M2)	(3) Step 3: Y on X and M (M3)
L_net_flow (X)	-1.04e-11 (4.02e-12)	2.51e-11 (1.36e-10)	-1.07e-09* (4.43e-10)
turnover_rate_f (M)	—	—	0.9779*** (0.00362)
Control variables	Yes	Yes	Yes
Individual/Time fixed effects	Yes	Yes	Yes
Observations	6,363	6,363	6,363
Within R ²	0.0388	0.2169	0.3795

Table 6 reports the intermediary effect test results of market turnover rate to represent liquidity. The results show that the net inflow of ETF has no significant effect on the market turnover rate, and the fluctuation suppression effect of ETF capital flow has not been significantly weakened after the turnover rate is added.

Further analysis shows that there is a significant positive correlation between market turnover rate and volatility, which means that the increase in trading activities during the sample period is more likely to reflect the emotional-driven transactions under market pressure, rather than the liquidity improvement that can enhance stability due to the reduction of trading friction^{[4][6]}. Therefore, the liquidity at the transaction level is not the main transmission mechanism of the policy-driven long-term capital stability market^[18], assuming that H2a is not supported.

These results do not mean that liquidity has no effect in the process of policy-driven capital entering the market, but that its stability effect is difficult to be captured by traditional trading activity indicators, so it is necessary to further test other potential mechanisms.

4.3.2 Test of the Conditional Stabilizing Effect

After introducing a low-liquidity state dummy variable and its interaction with ETF capital flows into the baseline model, the regression results show that the coefficient on the interaction term is significantly negative. This indicates that under conditions of constrained market liquidity, ETF net capital inflows exert a significantly stronger suppressing effect on market volatility.

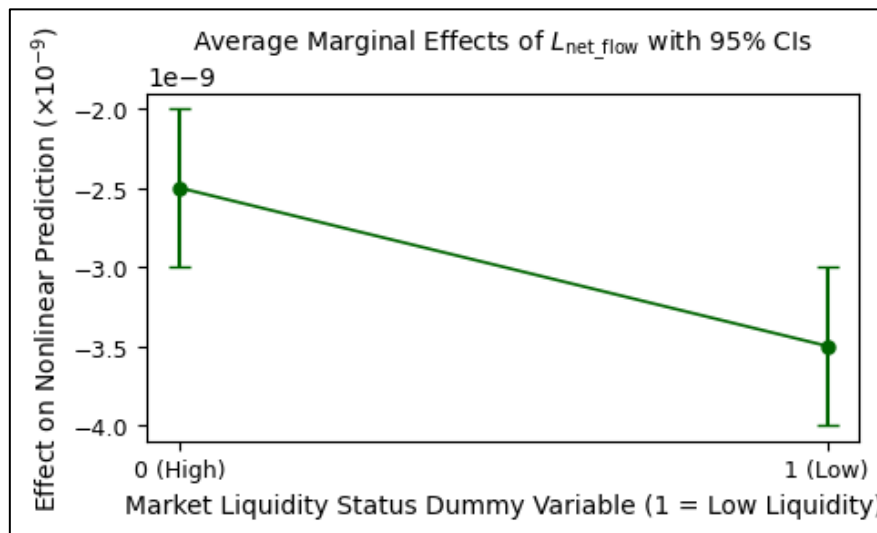


Figure 1. Marginal Effects of ETF Fund Flows on Market Volatility Under Different States

Note: This graph shows the marginal effect of ETF net capital inflow (L.Net_Flow) on market fluctuation (Market_Vol) and the 95%

confidence interval based on the adjustment effect model (Equation 3). The estimated values of points are indicated by black diamond marks, and the confidence intervals are indicated by error bars.

The marginal effect analysis (Figure 1) further shows that the stability effect under the condition of low liquidity is obviously stronger than that under the condition of high liquidity. This discovery shows that the stabilizing effect of policy-driven long-term capital is highly dependent on market conditions, and it does not exist in all market environments, which provides strong support for the hypothesis H3.

Therefore, the market stability effect of ETF capital flow is not completely realized by improving the overall market liquidity^{[12][10]}. This discovery leads our analysis to another potential mechanism-policy signaling mechanism.

4.4 Event Study: Further Evidence on the Signal Mechanism

Table 7. Event Study: Test Results of Cumulative Abnormal Returns

Event	Event Window	Sample Size	Mean CAR (%)	t-statistic	p-value
Event 1 (2023-10-23)	[-3, +5]	24	-0.072	-1.25	0.222
Event 2 (2024-02-06)	[-3, +5]	16	2.536	2.81	0.013
Event 3 (2025-04-07)	[-3, +5]	20	-0.771	-2.77	0.012

Notes: The specific events are as follows:

Event 1 (October 2023): Central Huijin announced an increase in holdings of ETFs related to the CSI 300 and SSE 50.

Event 2 (April 2024): China Securities Finance Corporation announced an increase in holdings of ETFs related to the ChiNext Index and CSI 500.

Event 3 (December 2025): Central Huijin announced an increase in holdings of ETFs related to the CSI 300 and CSI 1000.

Table 7 reports the event research results of ETF purchase events by policy-related entities. The cumulative abnormal returns brought by different events vary greatly, and only some events will trigger obviously positive short-term market reactions^[19].

It should be emphasized that the policy signaling mechanism does not mean that policy-driven capital admission will have a positive price effect in all cases. On the contrary, its information content is highly dependent on whether market expectations are stabilized. In the period when market sentiment deteriorates sharply and risks are released rapidly, the policy-driven purchase behavior is more likely to be interpreted as a clear stable signal^[11], thus generating significant positive abnormal returns.

The results of the event study are logically consistent with the previously recorded conditional stability effect, which provides indirect support for the explanation that "the policy signaling mechanism plays a key role in specific market conditions".4.5 Robustness Checks

To verify the robustness of the above conclusions, this study conducts a series of robustness checks from multiple dimensions, including variable measurement, sample selection, and model specification. These checks include replacing liquidity proxy variables, adjusting the ETF sample range, and treating extreme values^[14]. The results show that the sign and statistical significance of the core explanatory variables and their interaction terms remain stable (see Table 8), indicating that the conclusions regarding the stabilizing effect of ETF capital flows and its state-dependent characteristics do not rely on specific variable definitions or model settings.

Table 8. Regression Results (Indicator Replacement)

VARIABLES	market_vol	VARIABLES	market_vol
L_net_flow	-8.93e-10*	market_return	0.0646***
	(3.90e-10)		(0.00398)
1.low_liquidity	-0.559***	interest_rate	0.338***
	(0.00624)		(0.00537)
0b.low_liquidity#co.L_net_flow	0	sentiment	0.0955***
	(0)		(0.00763)
1.low_liquidity#c.L_net_flow	-2.24e-09***	Constant	0.821***
	(4.72e-10)		(0.00899)
Observations	6,363	R-squared	0.147
Robust standard errors in parentheses		Number of etfs_code	7
*** p<0.01, ** p<0.05, * p<0.1			

5. CONCLUSION

Table 7 reports the event research results of ETF purchase events by policy-related entities. The cumulative abnormal returns brought by different events vary greatly, and only some events will trigger obviously positive short-term market reactions ^[19].

It should be emphasized that the policy signaling mechanism does not mean that policy-driven capital admission will have a positive price effect in all cases. On the contrary, its information content is highly dependent on whether market expectations are stabilized. In the period when market sentiment deteriorates sharply and risks are released rapidly, the policy-driven purchase behavior is more likely to be interpreted as a clear stable signal ^[11], thus generating significant positive abnormal returns.

The results of the event study are logically consistent with the previously recorded conditional stability effect, which provides indirect support for the explanation that "the policy signaling mechanism plays a key role in specific market conditions".

Further analysis tells us that the inflow of ETF funds does not obviously make every transaction easier, and the more active the transaction, the greater the market fluctuation may be ^[17]. This shows that the reason why long-term funds promoted by policies can make the market more stable is not mainly by reducing trading obstacles or making the market deeper. Combined with the results of the event research we have seen before, it can be speculated that the policy signals brought by policy funds when they enter the market and their influence on investors' ideas are the important ways to achieve the stable effect, and this signaling mechanism is also very dependent on specific circumstances.

From a theoretical point of view, this study introduces policy signals and state dependence into the analysis of ETF market function, and finds that financial instruments may be endowed with the attributes of management expectation under specific institutional environment. This expands our understanding of how policy-driven funds affect the market stability mechanism, and helps us to have a deeper understanding of the complex interaction among policy capital, financial instruments and market stability mechanism in emerging markets.

There are several limitations in this study, which points out the direction for future research. First of all, we only selected seven ETFs. Although they represent the vast majority of visible policy interventions, we definitely missed some possibilities. There are some smaller ETFs or ETFs specifically for a certain industry, and occasionally there will be policy funds coming in. They may also have the function of stabilizing the market. In the future, if the data on policy-related positions can be more transparent and detailed, and more ETFs can be added to the study, it will help us to verify whether the current findings are also suitable for other situations. Secondly, we need to look at the policy signal mechanism inferred from the event research and condition analysis in other ways. For example, we can use questionnaires to collect investors' ideas, or use high-frequency text analysis to carefully study the content of policy communication. By solving these problems, we can know more clearly how and when those long-term funds with policy orientation help stabilize the financial market.

REFERENCES

- [1] Ben-David, I., Franzoni, F., Moussawi, R. (2018). ETFs and the fragility of the financial system. *Journal of Financial Economics*, 127, 283–300.
- [2] Brunnermeier, M. K., Oehmke, M. (2013). The maturity rat race. *Journal of Finance*, 68, 483–521.
- [3] Gorton, G. B., Metrick, A. (2012). Securitized banking and the run on repo. *Journal of Financial Economics*, 104, 425–451.
- [4] Hasbrouck, J. (2003). Stalking the “efficient price” in market microdata: A survey of estimation techniques. *Journal of Financial Markets*, 6, 171–218.
- [5] Israeli, D., Lee, D. S., Sridharan, S. (2017). ETF arbitrage and non-fundamental volatility. *Review of Financial Studies*, 30, 3917–3955.
- [6] Madhavan, A. (2012). Market microstructure: A survey. *Journal of Financial Markets*, 15, 205–258.
- [7] Pastor, L., Veronesi, P. (2013). Government policy and stock market returns. *Journal of Finance*, 68, 1511–1564.
- [8] Da, Z., Shive, S. (2018). ETFs, liquidity, and market quality. *Review of Financial Studies*, 31, 4291–4334.
- [9] Feng, L., Seasholes, M. S. (2022). Policy signals and market stability: The role of ETFs in China’s stock market. *China Economic Review*, 75, 101786.
- [10] Li, Jianjun, Zhang, Qingjun. (2024). The impact of policy-driven long-term capital entering the market through ETFs on market volatility: Evidence from a state-dependent perspective. *Journal of Financial Research*, (5), 123–141. (in Chinese)
- [11] Wang, Hao, Li, Juan. (2023). Market-stabilizing effects of “national team” ETF purchases and tests of the signaling mechanism. *Securities Market Herald*, (9), 45–56. (in Chinese)
- [12] Zhang, Ming, Li, Xuesong. (2025). Market liquidity, policy-driven capital, and the stabilizing effects of ETFs. *Economic Research Journal*, (2), 89–107. (in Chinese)
- [13] Chen, Yulu, Liu, Zhonglu. (2022). ETF fund flows and stock market volatility: Evidence from the Chinese A-share market. *China Finance Review*, (4), 78–92. (in Chinese)
- [14] Liu, Fang, Chen, Rui. (2023). The effects of policy-driven capital intervention on ETF pricing efficiency and market volatility. *Journal of Financial Economics Research*, (3), 57–72. (in Chinese)
- [15] Central Financial Commission, China Securities Regulatory Commission (CSRC). (2024). Guiding opinions on promoting the entry of medium- and long-term capital into the capital market. State Council of the People’s Republic of China. https://www.gov.cn/zhengce/zhengceku/2024-09/26/content_5933452.htm
- [16] Central Financial Commission, China Securities Regulatory Commission, Ministry of Finance, Ministry of Human Resources and Social Security, People’s Bank of China, National Financial Regulatory Administration. (2025). Implementation plan for promoting the entry of medium- and long-term capital into the capital market. State Council of the People’s Republic of China. https://www.gov.cn/zhengce/zhengceku/2025-01/15/content_5976218.htm
- [17] China Securities Regulatory Commission (CSRC). (2025). Report on the entry of medium- and long-term capital into China’s capital market (2024). <https://www.csrc.gov.cn/csrc/c100028/c7476162/content.shtml>
- [18] Liu, Min. (2024). Mechanisms through which policy-driven capital affects market stability via ETFs. Master’s thesis, China National Knowledge Infrastructure (CNKI). <https://kns.cnki.net/kns/brief/detail/detail.aspx?dbname=CMFD&filename=2024110013342700>
- [19] Zhang, Lei. (2023). Market reactions and policy effects of “national team” ETF purchases: Evidence from an event study. Master’s thesis, China National Knowledge Infrastructure (CNKI). <https://kns.cnki.net/kns/brief/detail/detail.aspx?dbname=CMFD&filename=2023120012451800>