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Market Power and Money Market Funds Risk-Taking

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Abstract

This paper investigates the relationship between market power and risk-taking behavior in China's money market funds. Using a dual methodological approach that combines demand estimation and a natural experiment, we demonstrate that increased market power significantly decreases funds' risk-taking. Our analysis proceeds in two stages: 1) We derive fund-specific investor elasticities through demand estimation as a measure of market power. 2) We exploit the staggered introduction of MMFs for digital transactions on Alipay, the world's largest digital payment platform, as a natural experiment. Our findings reveal that upon becoming eligible for digital transactions, funds experience a decrease in investors' demand elasticity; this increase in market power subsequently leads to reduced risk-taking behavior.

1 Introduction

Money market funds (MMFs) have emerged as crucial financial intermediaries, providing short-term financing to various institutions. With assets under management exceeding \$6.15 trillion in the United States and \$1.8 trillion in China,

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MMFs play a significant role in the global financial landscape. Recently, there has been much debate about MMFs buying riskier assets to achieve higher returns. Kacperczyk and Schnabl (2013) argue that MMFs had strong incentive to take on risk when the opportunity arises. The associated risk-taking is an important driver of fragility of the financial market (Chernenko and Sunderam, 2012; Schmidt, Timmermann, and Wermers, 2013). Consequently, understanding the factors that influence MMFs' risk-taking is of great importance.

MMFs are part of a broader category of "money-like assets," which include offerings from both the public and private sectors. Investors are often willing to pay a premium to hold such money-like assets (Nagel 2016; Sunderam, 2015). This unique characteristic can confer market power to MMFs, as investors may accept lower returns in exchange for the transaction convenience these funds offer. In this paper, we investigate whether this market power influences the risk-taking behavior of MMFs.

We estimate an empirical model of investor demand for MMFs using a dataset covering Chinese MMFs over the period 2013-2021. This model incorporates investors with diverse preferences for differentiated MMFs. We then estimate the demand elasticities with respect to returns for MMFs, which serve as an important determinant of market power. All else equal, investors are less sensitive to fund's returns if demand elasticities is low. In this context, an increase in demand elasticities implies a decrease in market power.

We identify a novel cross-sectional pattern in MMF risk-taking behavior. Funds that enjoy greater market power exhibit a distinctive asset allocation: they hold fewer bonds, maintain a higher proportion of negotiable bank deposits, and operate with lower leverage ratios. As negotiable bank deposits offer a high degree of safety and liquidity but low returns, this pattern suggests that funds with high market power prioritize safety and liquidity in their investment strategies. On the other hand, increased market power also influences MMFs' portfolio duration decisions. Specifically, market power tends to increase the duration of fund liabilities. This, in turn, allows funds to extend the duration of their asset portfolios to better match their liability structure.

A significant challenge in our analysis is disentangling the effects of market power on risk-taking from those of investment opportunities, as these factors may be correlated. To address this issue, we examine the context of Alipay, the world's largest digital payment service provider, which offers a unique setting for our study. Specifically, we focus on a product named Yu'e Bao, meaning "leftover treasures", that Alipay introduced in 2013.

Prior to launching this groundbreaking product, Alipay had already established a dominant position in China's third-party internet payment market, commanding approximately 48.5% of the market share. Initially, Alipay users faced a choice: keep funds in accounts for convenient spending or invest in less liquid funds offering higher returns. Yu'e Bao revolutionized this dynamic by integrating Alipay users' spending accounts with money market funds. This integration allows users to earn returns on their savings while maintaining liquidity for immediate spending. Alipay users can transfer money into Yu'e Bao and, once transferred, can withdraw funds at any time to make payments instantly and free of charge.

From 2013 to 2018, Yu'e Bao maintained an exclusive partnership with a single fund, Tian-Hong. Between 2018 and 2019, Yu'e Bao expanded its investment options, incorporating an additional 28 money market funds into its platform. Notably, these newly included funds were not exclusive to Yu'e Bao; they had been previously traded on other brokerage platforms and continued to be available on those platforms after their inclusion in Yu'e Bao. We refer to this expansion of available funds as the "Yu'e Bao inclusion events." The transactional convenience offered by Yu'e Bao leads investors to accept lower returns in exchange for increased liquidity, thereby reducing demand elasticity. When a fund becomes available on Yu'e Bao, there is typically a decrease in demand elasticity (corresponding to an increase in market power). These "Yu'e Bao inclusion events" provide a unique opportunity to investigate the influence of market power on MMFs by comparing funds included in the Yu'e Bao list with those that have never been listed.

Our methodology follows the staggered difference-in-differences framework introduced by Callaway and Sant'Anna (2020), in which average treatment-on-treated (ATT) effects are estimated separately by group and time period. Our analysis reveals that the average of these group-time ATTs across all groups and treated time periods yields the following results: a -0.356 effect on demand elasticities, a 0.122 effect on negotiated deposit holding ratio, and a 0.305 effect on maturity. These findings indicate that inclusion in Yu'e Bao is associated with decreased demand elasticity (implying increased market power), increased holding of negotiated deposits, and extended portfolio maturity.

Overall, our results suggest that MMFs choose to take on less risk to avoid a potential default. These results has direct implication for funds competition and stability. In a highly competitive market, funds have low market power and are more willing to take on risk.

Our paper contributes to the growing literature on risk-taking behavior in MMFs. Kacperczyk and Schnabl (2013) found that during the 2007–2008 period, funds whose sponsors had lower reputation concerns engaged in higher risk-taking behavior compared to those with higher reputation concerns. Chodorow-Reich (2014) discovered that MMFs with higher administrative costs reached for higher returns in 2009–2011. Di Maggio and Kacperczyk (2017) observed that, in periods of low federal funds rates, independent MMFs took more risks than

MMFs associated with conglomerates. La Spada (2018) found that funds with higher default risk and lower risk-free rates reduced the risk of all funds. The most closely related work is that of Baghai, Giannetti and Jäger (2022), who empirically examined the effects of the 2014 MMF reform. This reform required prime funds to switch from constant to floating net asset value, making MMFs' liabilities less money-like and resulting in affected MMFs taking on more risk. Our study extends this literature in several ways: First, we focus on a different aspect of fund heterogeneity, namely market power, and directly measure its impact on risk-taking behavior. Second, we employ a novel identification strategy. The 2014 MMF reform in the U.S. changed both the floating NAV and the possibility of redemption gates simultaneously, potentially involving multiple mechanisms. Our approach, which leverages a transaction-based source of liquidity provision, complements the money-like properties studied in previous literature.

Our paper speaks to the growing literature on FinTech platforms. Hong, lu and Pan (2023) highlight the impact of FinTech platforms on the mutual fund industry in China. The centralized nature of the information on these platforms has intensified performance-chasing behavior among investors, creating a feedback loop that influences fund manager behavior. Chen and Jiang (2022) measure the liquidity premium that digital payment technologies brings to MMFs using a demand estimation framework. The dramatic increase in fund size following transaction eligibility on Alipay demonstrates the substantial value users place on transactional convenience in the digital economy. Wang and Li (2024) show that suggest a shift in investor priorities, valuing transactional convenience alongside traditional investment metrics using individual-level data from the world's largest digital payment platform Alipay. Our paper extends this literature by further analyzing fund risk-taking behavior.

Our paper also contributes to the literature on financial intermediary market power. Following Drechsler, Savov and Schnabl (2017), a growing body of research has investigated the role of bank deposit market power in bank asset choice; notable contributions include Li, Loutskina and Strahan (2023), Drechsler, Savov and Schnabl (2021), and Li and Song (2022). Carletti, Leonello and Marquez (2024) provides a overview of the literature on bank market power and highlight the implications of bank market power for credit provision and for financial stability. Our study extends this literature by examining how market power affects the risk-taking behavior of important nonbank financial intermediaries, specifically MMFs.

In a broad sense, our paper connects with the long-standing debate on the relationship between competition and financial stability. Some scholars have argued that a more competitive banking industry is more fragile (Keeley, 1990; Beck, Demirgüç-Kunt and Levine, 2006; Carlson, Correia and Luck, 2022). Others suggest that competition does not necessarily lead to higher risk-taking (Boyd and De Nicolo, 2005; Martinez-Miera and Repullo, 2010). While previous literature has primarily focused on the banking industry, our paper provides new evidence consistent with the first view, suggesting that competition may indeed lead to instability. Our results indicate that financial intermediaries achieving product differentiation through innovation to gain market power is beneficial for financial stability. This finding extends the competition-stability debate beyond traditional banking to include other financial intermediaries.

2 Institutional Background and Data

2.1 China's MMF Market

Figure 1 depicts the evolution of China's money market fund (MMF) industry. Emerging in 2003, the sector experienced its first significant growth in 2005. The introduction of internet platforms in China in 2013 revolutionized fund distribution, making MMFs directly accessible to investors online. Yu'ebao's launch in 2013 catalyzed MMF growth beyond traditional bank sales channels. By the end of 2020, the industry approached RMB 6 trillion in value. According to Fitch Ratings, China surpassed Europe in the second quarter of 2022 to become the world's second-largest MMF market, accounting for approximately 18% of global assets under management, behind only the United States (55%) and ahead of Europe (17%).

The Chinese money market fund (MMF) sector has rapidly ascended to become the world's second-largest by assets, propelled by attractive yields and innovative cash management technologies. However, this growth is accompanied by potential vulnerabilities due to a less stringent regulatory framework compared to developed economies. Chinese MMFs operate under rules that allow for greater risk exposure. For instance, they can leverage up to 20% of their assets, double the E.U. limit and in stark contrast to the zero-leverage policy in the United States. Furthermore, Chinese MMFs are permitted to engage in more extensive maturity transformation, with regulations allowing a weighted average maturity of up to 120 days on their assets—twice the U.S. limit. These regulatory disparities may incentivize Chinese MMFs to adopt more aggressive risk-taking strategies, potentially increasing their vulnerability to market shocks.

2.2 Yu'e Bao Overview

To understand Yu'e Bao, it's crucial to first contextualize Alibaba Group and Alipay. Founded in 1999, Alibaba Group has evolved into China's leading e-commerce conglomerate. The company's growth trajectory spans from its initial business-to-business (B2B) platform to the subsequent development of Taobao (consumer-to-consumer, C2C) and Tmall (business-to-consumer, B2C), consistently working towards a comprehensive e-commerce ecosystem. In October 2003, Alibaba Group introduced Alipay, a third-party payment platform akin to PayPal. Alipay rapidly became an essential tool for Taobao users, facilitating secure online transactions.

Yu'e Bao, a money market fund co-launched by Alipay and Tianhong Asset Management, began operations on June 13, 2013. Since its inception, it has experienced exponential growth. Since its inception, it has experienced exponential growth. At its core, Yu'e Bao operates as a money market fund (MMF) structured similarly to PayPal's MMF. However, Yu'e Bao's model differs in that users must actively transfer funds from their Alipay accounts to Yu'e Bao. This transfer represents the customer's purchase of shares in the "Tianhong Yu'e Bao Money Market Fund," managed by Tianhong Asset Management. Prior to Yu'e Bao's introduction, Alipay users had two distinct options for their funds. They could maintain a balance in their accounts for highly liquid payment transactions, or invest in mutual funds for potentially higher returns. However, this system had a significant limitation: funds invested in mutual funds within Alipay couldn't be used directly for payments. If a user needed to make an online purchase using invested funds, they first had to redeem their mutual fund holdings and then wait approximately two days for the proceeds to become available for payment.

Yu'e Bao's key innovation lies in its ability to offer investors both transaction convenience and investment returns simultaneously. The platform comprises a series of money market funds (MMFs) integrated with Alipay. Users can deposit money into Yu'e Bao, select from Alipay-supported funds, and purchase shares in their chosen fund. Crucially, these fund shares can be used directly for shopping payments. This system offers greater convenience than other MMFs with T+0 settlement, as those funds, while quickly accessible, cannot be used directly for transactions. Yu'e Bao thus uniquely combines the earning potential of MMFs with the immediate liquidity needed for everyday transactions.

Figure 2 illustrates the dynamics of the overall MMF market and Yu'e Bao-related funds since 2013. Yu'e Bao-related funds closely mirror the overall market trend. Initially, Yu'e Bao offered only one fund, managed by Tianhong Fund, which commanded a substantial market share from 2013 to 2018. In response to enhanced regulatory oversight in 2018, Yu'e Bao diversified its offerings, introducing 29 new funds in 2018 and 2019. Table A1 lists the information on these 29 MMFs. After a brief decline in 2019, the market share of Yu'e Bao-related funds has since shown an upward trajectory.

2.3 Data

This section describes the main data sources that we employ in our analyses. We obtain data on MMFs from CSMAR. Our sample period is 2013Q1 to 2021Q4, covering the entire MMF market classified by the China Security Regulation Commission. We calculate fund returns at the quarterly level using the montly seven-day annualized yield rate. The monthly seven-day annualized yield rate is

$$R_{j,m} = [(\frac{\sum_{d=1}^{7} R_d}{7}) * (\frac{365}{10000})] * 100\% \tag{1}$$

where R_d is the daily net return per 10,000 fund units. Using monthly data, we computed the average quarterly return for each fund. This quarterly performance metric serves as our primary indicator for evaluating fund performance in the subsequent analysis.

Table 1 reports the summary statistics of China's MMF market. The average annualized return is 2.984%. For the portfolio choices of the funds, the average fixed income share is 47.81%. For the other assets, the average bank deposit holdings is 30.72%. The average asset maturity is about 76 days, with the 90th percentile at 114 days.

3 Theoretical Hypothesis

We present a static theoretical model to derive empirical hypotheses regarding the effects of market power on risk-taking behavior.

3.1 Investor Demand

For investor demand, we consider a tractable and microfounded discrete-choice setting in which each investor chooses exactly one MMF to maximize utility. In the model, the MMFs market consists of I identical investors indexed by $i \in \{0, 1, \ldots, I\}$ and J MMFs indexed by $j \in \{0, 1, \ldots, J\}$. MMF j offers a gross return r_j and has other characteristics x_j. When investors choosing a MMF, they evaluate a fund by its returns and other attributes. Investor i's utility from investing MMF j is given by:

$$u_{i,j,t} = \alpha_{1,i} r_{j,t} + x'_{j,t}\beta + \xi_{j,t} + \epsilon_{i,j,t} \tag{2}$$

Where $r_{j,t}$ is the return of MMF j in period t. $x_{j,t}$ is the other observed characteristics of fund j in period t. $\xi_{j,t}$ represents utility from the unobserved (to the econometrican) characteristics of fund j. $\epsilon_{i,j,t}$ is the idiosyncratic utility shocks. The heterogeneous coefficients allows investors to have different tastes. For example, investors might have different beliefs regarding how the money-likeness affect on future outputs, i.e., some investors appreciate money-likeness more compared to other investors. We assume the following assumption:

$$\alpha_{1,i} = \alpha_1^o + \alpha_1^u \nu_{1,i}, \nu_{1,i} \sim N(0,1) \tag{3}$$

Where α_1^o denotes the average valuation for the return, α_1^u denotes the standard deviation for the valuation, and $\nu_{1,i}$ is an i.i.d. standard normal random variable.

By assuming $\epsilon_{i,j}$ follows the type 1 generalized extreme value distribution, we obtain the following expression of the individual choice probability:

$$s_{j,t} = \int_\nu \frac{exp(\alpha_{1,i} r_{j,t} + x'_{j,t}\beta + \xi_{j,t})}{1 + \sum_{k \in J_t} exp(\alpha_{1,i} r_{k,t} + x'_{k,t}\beta + \xi_{k,t})} dF(\nu) \tag{4}$$

We consider the case that infinitely many investors are in a market, we can equate the individual choice probability with the predicted market share of MMF j. In this case, the investors' elasiticity on return is given by

$$\eta_{j,t} = \frac{\partial s_{j,t}}{\partial r_{j,t}} \frac{r_{j,t}}{s_{j,t}} = (\frac{r_{j,t}}{s_{j,t}}) \int_\nu \alpha_i s_{j,t}(1 - s_{j,t}) dF(\nu) \tag{5}$$

The demand elasticity to the return varies over time through changing fund characteristics, interacting with the distribution of random coefficients on the returns. When investors are less sensitive to fund j's return, $\eta_{j,t}$ will be lower. Hence, we identify funds with lower elasticity $\eta_{j,t}$ as having greater market power.

3.2 MMFs Risk-Taking

MMFs choose the riskiness of their asset portfolio. We assume that the return on fund j's asset can be written as $r_{j,t} = r_t + \theta_{j,t}$ where r is the policy rate and θ_j is the risk premium earned by holding riskier assets. As in Allen and Gale (2004) and Boyd and De Nicolo (2005), the risk-taking behavior of fund j increases the likelihood of fund failures. The survival probability of fund j is given by the function $p(\theta_j)$. $p(\cdot)$ is a decreasing function, as risk-taking increases the probability of fund defaults. Second, we assume that $p(\cdot)$ is concave, as the risk premium θ_j rises, the fund needs to entail greater default risk in exchange for an additional risk premium. If a fund does not default, its payoff is propertional to its asset under management. Conditional on no default, fund j chooses its risk-taking θ_j to maximize its asset under management

$$Max_{\theta_j} p(\theta_{j,t})(\gamma_{j,t} - c_{j,t})(s_{j,t} \cdot M_t)$$

where $\gamma_{j,t} \in (0, 1)$ is management fee paid by the investors, $c_{j,t}$ is the marginal cost incurred by the fund to provide a certain level of performance. M_t is the aggregate size of the market, $s_{j,t}(r_{j,t}) \cdot M_t$ is the asset under managment. Following Chevalier and Ellison (1997), We define the main goal of a fund in terms of maximization of the managed assets. Our analysis concentrates on risk-taking decisions, as management fees are typically established at the fund's inception and remain largely static thereafter.

$$p'(\theta_{j,t})(\gamma_{j,t} - c_{j,t})(s_{j,t} \cdot M_t) + p(\theta_{j,t})(\gamma_{j,t} - c_{j,t})\frac{\partial s_{j,t}}{\partial r_{j,t}}\frac{\partial r_{j,t}}{\partial \theta_{j,t}}M_t = 0 \qquad (6)$$

Since we assume that $\partial r_{j,t}/\partial \theta_{j,t} = 1$, the first-order condition (6) can be written as

$$p'(\theta_{j,t})s_{j,t} + p(\theta_{j,t})\frac{\partial s_{j,t}}{\partial r_{j,t}} = 0 \quad (7)$$

We can consolidate the demand elasticity (5) into (7), and the equation (7) can be written as

$$p'(\theta_{j,t}) + p(\theta_{j,t})\frac{1}{r_{j,t}}\eta_{j,t} = 0 \quad (8)$$

Equation (8), illustrates the trade-off faced by funds. The first term shows that as a fund takes on more risk, the likelihood of default increases. The second term of (8) represents the additional benefit gained through risk-taking, which only materializes if the fund avoids default. When funds face investors with higher demand elasticity $\eta_{j,t}$, the marginal benefit of risk-taking increases. Consequently, the second term in equation (8) becomes more dominant, leading funds to take higher levels of risk, which leads to our first empirical hypothesis:

Hypothesis. Funds exhibit increased risk-taking behavior when they have lower market power.

4 Empirical Analysis and Results

4.1 Estimating Demand Elasticities

In order to estimate return elasticities, we employ methods from the industrial organization literature following Egan, Hortaçsu and Matvos (2017), Xiao (2020). A standard indentifying concerns is that fund's return $r_{j,t}$ is endogeneous and responds to the $\xi_{j,t}$. For example, $\xi_{j,t}$ can be the unobserved (to the econometrican) manager skill. In this case, manager with higher unobserved skill will generate higher returns, implying that $\xi_{j,t}$ is correlated with $r_{j,t}$.

In order to take into account such endogeneity, we use an instrumental variables approach. First, we use fund-level cost shocks. We instrument the excess returns by two types of non-interest expense ratios: the other expenses or the audit fees divided by the fund asset size. Second, we also use asset composition information such as the ratio of fixed income asset to total asset as instruments. The rationale is that these instrumental variables affect investors' demand only through the returns instead of the unobserved characteristics of the funds. Let $\mathbf{z}_{i,t}$ be a vector of instruments to help identify the variance of the random coefficients on the return. The moment condition is

$$\mathbb{E}[\xi_{j,t}|\mathbf{z}_{i,t}, \mathbf{x}_{j,t}] = 0 \tag{9}$$

We can rewrite the market share (4) as

$$s_{j,t} = \int_{\nu} \frac{exp(\delta_{j,t} + \mu_{i,j,t})}{1 + \sum_{k \in J_t} exp(\delta_{k,t} + \mu_{i,k,t})} dF(\nu) \tag{10}$$

where

$$\delta_{j,t} = \alpha_1^o r_{j,t} + \alpha_2^o L_{j,t} + x'_{j,t}\beta + \xi_{j,t} \tag{11}$$

$$\mu_{i,j,t} = \alpha_1^u \nu_{i,1} r_{j,t} + \alpha_2^u \nu_{i,2} L_{j,t} \tag{12}$$

Where $L_{j,t}$ is the time-varing variable indicating whether Alipay includes the fund, this variable represents whether the fund supports digital payment functionality. Equation (11) is the mean utility, which do not depond on investor specific variables. Equation (12) is the deviation from the mean. The esimation proceeds as follows. First, we use simulation method to obtain the market share (10).

$$s_{j,t}^{S} = \frac{1}{ns}\sum_{i=1}^{ns}\frac{exp(\delta_{j,t}+\mu_{i,j,t})}{1+\sum_{k\in J_t} exp(\delta_{k,t}+\mu_{i,k,t})} \tag{13}$$

We computing the market share (13), and the relevant integrals are approximated using 1000 Halton draws. Then we can compute $\xi_{j,t} = \delta_{j,t} - \alpha_1^o r_{j,t} + x'_{j,t}\beta$ and evaluate the objective function corresponding to moment condition (9). We will stop the estimation proceeds if the objective function is minimized. Otherwise, we update the parameters and go back to compute the market share numerically.

Table 2 presents our estimation results, including the relative market shares with respect to returns and other fund characteristics. The mean parameter estimate for returns is 3.253, indicating that funds can attract more investors by providing higher returns. This coefficient suggests that when the annualized return increases by one standard deviation above its mean, the investor's utility increases by 3.67 (= 3.253 * 1.127).

The coefficient for digital payment is 1.925. On average, when funds become available for digital payment, their utility increases by this amount. To quantify the impact on utility, we can calculate investors' willingness to pay for digital payment functionality. This is determined by dividing the coefficient of digital payment by the coefficient of annualized return. Our results indicate that an investor is willing to forgo 52% (= (1.925/3.253)*100%) of their annualized return to access digital payment features.

Notably, in the random coefficients model, the standard deviations of annualized return and digital payment are also significantly different from zero, implying considerable heterogeneity among investors in their valuation of fund returns and money-like attributes. This heterogeneity suggests that some investors may prefer funds with lower returns or those not integrated into Yu'e Bao, contrary to the average preference.

Armed with the demand estimates, we can obtain the fund-quarter level elasticity estimates using the equation (5). Table 3 summarizes the demand elasticities for money market funds. The average elasticity of total sample is 2.137 indicates that, a 1% relative increase in annualized returns corresponds to a 2.137% rise in fund demand. For context, Ho (2012) estimated a demand system for banks in China, obtaining coefficient estimates ranging from 0.022 to 0.691 for the three major state-owned banks. The significantly higher demand elasticity for MMFs compared to state-owned bank deposits suggests that the latter are much stickier.

4.2 Investor Elasticities and Risk-Taking Metrics

In the section, we use the regression below to test the relationship between investor elasticities on return and risk-taking metrics:

$$Risk_{j,t} = \beta\eta_{j,t} + x'_{j,t}\gamma + k_t + k_j + \epsilon_{j,t} \tag{14}$$

Where $Risk_{j,t}$ is one of the risk-taking metrics for fund j in quarter t, k_t is a year-quarter fixed effect and k_j is a fund fixed effect. $X_{j,t}$ are control variables. The parameter of interest is β, which measures the change of risk-taking behavior per one unit increase of investor elasticities.

$Risk_{j,t}$ is either Deposit Share, Bond Share, Leverage and maturity. Deposit share is the sum of bank deposits and reserve as a percentage of the fund's Net Asset Value (NAV). Bond Share is bond as percentage of the fund's NAV, including corporate bonds, government bond, commercial papers and short-term notes. Leverage is the ratio of a fund's average quarterly repurchase balance to its total asset size. Maturity is the logarithm of value-weighted average maturity of the fund portfolio at the filing date.

Table 3 presents the regression results for our four risk metrics. Column (1) shows the regression results with deposit holding. A one-standard deviation decrease in investors' elasticities corresponds to a 0.01% (= 0.005*1.3) increase in deposit holdings. Column (2) shows the regression results with bond holding. A one-standard deviation decrease in investors' elasticities corresponds to a 0.01% (=0.01*1.3) decrease in bond holdings. From an asset perspective, we observe that as market power increases, funds tend to substitute bonds with a higher proportion of bank deposits. In the column (3), we report the results pertaining to leverage ratios. Funds with higher market power exhibit lower leverage ratios.

On the other hand, column (4) shows that funds with higher market power have higher asset maturity. A one-standard deviation decrease in investors' elasticities corresponds to a 0.05% increase in asset maturity (calculated as exp(0.039 * 1.3) - 1). This finding suggests that increased market power enables funds to invest in long-term asset.

4.3 The Effect of Yu'e Bao Inclusion

We estimate the treatment effects of Yu'e Bao inclusion using the framework proposed by Callaway and Sant'Anna (2020) because we have multiple units of observation (funds) that are treated (included) at different time periods.

In this framework, $Y_{j,t}$ is the observed outcome of interest, where j denote a fund and t a time period (quarter). For each j, $G_{j,g}$ is a binary variable equal to 1 if j was first included in Yu'e Bao at time g. g is the date at which Yu'e Bao inclusion was implemented in fund j. $Y_{j,t}(0)$ denote j's potential outcome at time t if untreated at time t. $Y_{j,t}(g)$ denote j's potential outcome at time t if j wase first treated at time g. In our setting, once a fund is included by Yu'e Bao, it remains included, the intensity of Yu'e Bao inclusion is the same for all units and time periods. The observed and potential outcomes for each fund j are related as follows:

$$Y_{j,t} = Y_{j,t}(0) + \sum_{g=1}^{T} [Y_{j,t}(g) - Y_{j,t}(0)] G_{j,g} \tag{15}$$

We only observe one potential outcome path for each fund. For those that do not included by Yu'e Bao in any time period, observed outcome are untreated potential outcomes in all periods. Callaway and Sant'Anna (2020) impose some assumptions for indentify the treatment effect from the data. In this paper, we consider the assumptions that impose restrictions on the evolution of untreated potential outcomes based on a "Never-Treated" group. For each g, h, and t such that $g \leq t \leq h$, we assume that

$$\mathbb{E}[Y_{j,t}(0) - Y_{j,t-1}(0) | X, G_{j,g} = 1] = \mathbb{E}[Y_{j,t}(0) - Y_{j,t-1}(0) | X, C_{j,h} = 1] \tag{16}$$

Where C is a binary variable that is equal to one if a fund do not included by Yu'e Bao in any time period. This assumption requires that if treated funds had instead not been treated, then their outcome would evolve in the same way as funds that have never been treated in any time periods. Based on this assumption, the average treatment effect on treated (ATT) from t quarters from the treatment for funds who included in Yu'e Bao in quarter g is identified as

$$ATT(g,t) = \mathbb{E}[(\frac{G_{j,g}}{\mathbb{E}[G_{j,g}]} - \frac{\frac{p_g(X_{j,g})C_{j,g}}{1-p_g(X_{j,g})}}{\mathbb{E}[\frac{p_g(X_{j,g})C_{j,g}}{1-p_g(X_{j,g})}]})(Y_{j,g+t} - Y_{j,t-1})] \tag{17}$$

Where $G_{j,g}$ is 1 if fund j included by Yu'e Bao in quarter g and zero otherwise, $C_{j,g}$ is 1 if fund j never included by Yu'e Bao and 0 otherwise, $p_g(X_{j,g})$ is the probability that fund j with covariates $X_{j,g}$ included by Yu'e Bao in quarter g conditional on $G_{j,g} = 1$ or $C_{j,g} = 1$. Each group-time treatment effect,

$ATT(g,t)$, is estimated by computing a inverse probability weighting estimate. For $X_{j,g}$, we used the age of the fund, as this variable was essentially unaffected by the inclusion of Yu'e Bao.

4.3.1 Overall treatment effect

We report the results in two ways. First, we report the overall ATT θ_W, which is a weighted average of $ATT(g,t)$ for $t \geq g$ over all groups and time periods, that is,

$$\theta_W = \frac{1}{\kappa} \sum_{g} \sum_{t>g} \omega_g ATT(g,t) \tag{18}$$

where κ is the number of combinations of g, t, with $t \geq g$, and ω_g are weights proportional to the number of observations in each group.

In columns (1), (3), and (5) of Table 4, we report the results of the overall ATT for investors' elasticities, fund share and fund return, respectively. We find that Yu'e Bao inclusion reduces investors' elasticities by 0.36% on average in the post-treatment period. On the other hand, the Yu'e Bao inclusion increases fund' market share by 151.4% on average in the post-treatment period. However, we do not find any significant impact of Yu'e Bao inclusion on the returns of the included funds. These findings indicate that inclusion in Yu'e Bao allowed funds to capture a larger market share without offering higher returns. Consequently, Yu'e Bao inclusion reduced investors' price sensitivity, thereby conferring greater market power to the included funds.

In columns (1), (3), (5) and (7) of Table 5, we report the results of the overall ATT for deposit holding share, bond holding share, leverage and maturity, respectively. We can see that the Yu'e Bao inclusion increases the deposit holding share by 0.12% on average in the post-treatment period, and the maturity by 30.5% on average on the post-time treatment period. We do not find any significant results for bond holding share and leverage.

Therefore, our estimates suggest that Yu'e Bao inclusion substantailly increase both deposit holding share and asset maturity. Overall, we find that an exogenous shock increasing MMFs' market power leads funds to allocate more assets to bank deposits. In China, the elimination of penalties for early withdrawal from negotiated deposits has made these instruments an ideal investment for MMFs, offering both high security and high liquidity. On the other hand, the observed increase in asset maturity warrants further discussion. The extension of asset maturity implies that funds are assuming greater interest rate risk. Consequently, the shift towards deposit holdings driven by increased market power is partly compensated by a lengthening of portfolio maturity.

4.3.2 Treatment effects by length of inclusion

We also report the treatment effect by length of inclusion. We report $\theta(e)$ as the weighted average of $ATT(g,t)$ for all t and g such that $t-g=e$, that is,

$$\theta(e) = \frac{1}{\kappa_e} \sum_g \omega_g ATT(g, g+e) \tag{19}$$

For $e<0$, $\theta(e)$ captures the trend in outcomes for funds that are e quarters away from the inclusion relative to other funds that have never been treated. For $e>0$, $\theta(e)$ captures the trend in outcomes for funds that are e quarters into the inclusion relative to other funds that have never been treated.

Column (2) in Table 4 and Figure 3 show that the treatment effect on investors' elasticities increases with the duration of inclusion. The estimates imply that over a three-quarter period, Yu'e Bao inclusion reduces investors' elasticities by 0.35%. Over a four-quarter period, the inclusion event reduces investors' elasticities by 0.39%. We did not observe a significant decrease in elasticities during the first two quarters following inclusion. From (5), we can see that the demand elasticity to return varies over time through changing fund characteristics, interacting with the distribution of random coefficients on the return. When funds are included in Yu'e Bao, the more return-elastic investors substitute into competing funds with higher returns or outside options. Thus, the elasticities to return decrease because the remaining investors are, on average, less return-elastic. This process may require a certain period to fully manifest, which could potentially explain why the decrease in elasticity was not significant during the first two quarters following inclusion. The gradual nature of this effect aligns with the observed increasing treatment effect over time.

Figure 3 demonstrates that there are no significant differential trends in the pre-treatment period between funds that are four quarters prior to Yu'e Bao inclusion and other funds that have never been treated. This provides support the assumption discussed in (16). Treated funds do not trend differently from untreated funds in the periods before the treatment.

Column (2), (4), (6), and (8) in Table 5 report the results of the overall ATT for deposit holding share, bond holding share, leverage and maturity, respectively. Figure (6), (7), (8) and (9) plots our estimates and 95% confidence intervals adjusting for multiple hypothesis testing. We find that treatment effect is increasing with the length of Yu'e Bao inclusion for deposit holding share and maturity. Over a 4-quarter period, the Yu'e Bao inclusion increases deposit holding share by 0.23% and asset maturity by 51.5%.

5 Conclusions

This paper examines the relationship between market power and risk-taking behavior in Chinese MMFs. Our analysis yields several important findings. First, we find a significant positive correlation between investor elasticity and fund risk-taking. Funds with more return-sensitive investors tend to adopt riskier strategies, as evidenced by higher proportions of bank deposit in their portfolios, and increased leverage. Second, The inclusion of funds in Yu'e Bao, a major digital payment platform, serves as an exogenous shock that decreases investor elasticity. This leads to more conservative risk-taking behavior among affected funds.

These findings have important implications for regulators, investors, and fund managers. The relationship between investor behavior and fund risk-taking suggests that regulators should consider investor characteristics when assessing the stability of money market funds. Furthermore, we find that money market funds with greater market power are more inclined to invest their assets in negotiated deposits with commercial banks. The potential impact of these investments on commercial banks presents an important avenue for future research.

References

[1] Franklin Allen and Douglas Gale. Competition and financial stability. *Journal of money, credit and banking*, pages 453–480, 2004.

[2] Ramin P Baghai, Mariassunta Giannetti, and Ivika Jäger. Liability structure and risk taking: Evidence from the money market fund industry. *Journal of Financial and Quantitative Analysis*, 57(5):1771–1804, 2022.

[3] Thorsten Beck, Asli Demirgüç-Kunt, and Ross Levine. Bank concentration, competition, and crises: First results. *Journal of banking & finance*, 30(5):1581–1603, 2006.

[4] John H Boyd and Gianni De Nicolo. The theory of bank risk taking and competition revisited. *The Journal of finance*, 60(3):1329–1343, 2005.

[5] Brantly Callaway and Pedro HC Sant'Anna. Difference-in-differences with multiple time periods. *Journal of econometrics*, 225(2):200–230, 2021.

[6] Elena Carletti, Agnese Leonello, and Robert Marquez. Market power in banking. *Annual Review of Financial Economics*, 16, 2024.

[7] Mark Carlson, Sergio Correia, and Stephan Luck. The effects of banking competition on growth and financial stability: Evidence from the national banking era. *Journal of Political Economy*, 130(2):462–520, 2022.

[8] Zefeng Chen and Zhengyang Jiang. The liquidity premium of digital payment vehicle. *Available at SSRN 4006574*, 2022.

[9] Sergey Chernenko and Adi Sunderam. Frictions in shadow banking: Evidence from the lending behavior of money market mutual funds. *The Review of Financial Studies*, 27(6):1717–1750, 2014.

[10] Judith Chevalier and Glenn Ellison. Risk taking by mutual funds as a response to incentives. *Journal of political economy*, 105(6):1167–1200, 1997.

[11] Gabriel Chodorow-Reich. Effects of unconventional monetary policy on financial institutions. Technical report, National Bureau of Economic Research, 2014.

[12] Marco Di Maggio and Marcin Kacperczyk. The unintended consequences of the zero lower bound policy. *Journal of Financial Economics*, 123(1):59–80, 2017.

[13] Itamar Drechsler, Alexi Savov, and Philipp Schnabl. The deposits channel of monetary policy. *The Quarterly Journal of Economics*, 132(4):1819–1876, 2017.

[14] Itamar Drechsler, Alexi Savov, and Philipp Schnabl. Banking on deposits: Maturity transformation without interest rate risk. *The Journal of Finance*, 76(3):1091–1143, 2021.

[15] Mark Egan, Ali Hortaçsu, and Gregor Matvos. Deposit competition and financial fragility: Evidence from the us banking sector. *American Economic Review*, 107(1):169–216, 2017.

[16] Chun-Yu Ho. Market structure, welfare, and banking reform in china. *Journal of Comparative Economics*, 40(2):291–313, 2012.

[17] Claire Yurong Hong, Xiaomeng Lu, and Jun Pan. Fintech platforms and mutual fund distribution. *Management Science*, 2024.

[18] Marcin Kacperczyk and Philipp Schnabl. How safe are money market funds? *The Quarterly Journal of Economics*, 128(3):1073–1122, 2013.

[19] Michael C Keeley. Deposit insurance, risk, and market power in banking. *The American economic review*, pages 1183–1200, 1990.

[20] Gabriele La Spada. Competition, reach for yield, and money market funds. *Journal of Financial Economics*, 129(1):87–110, 2018.

[21] Lei Li, Elena Loutskina, and Philip E Strahan. Deposit market power, funding stability and long-term credit. *Journal of Monetary Economics*, 138:14–30, 2023.

[22] Ziang Li and Jihong Song. Deposit market power and bank risk-taking. 2022.

[23] David Martinez-Miera and Rafael Repullo. Does competition reduce the risk of bank failure? *The Review of Financial Studies*, 23(10):3638–3664, 2010.

[24] Stefan Nagel. The liquidity premium of near-money assets. *The Quarterly Journal of Economics*, 131(4):1927–1971, 2016.

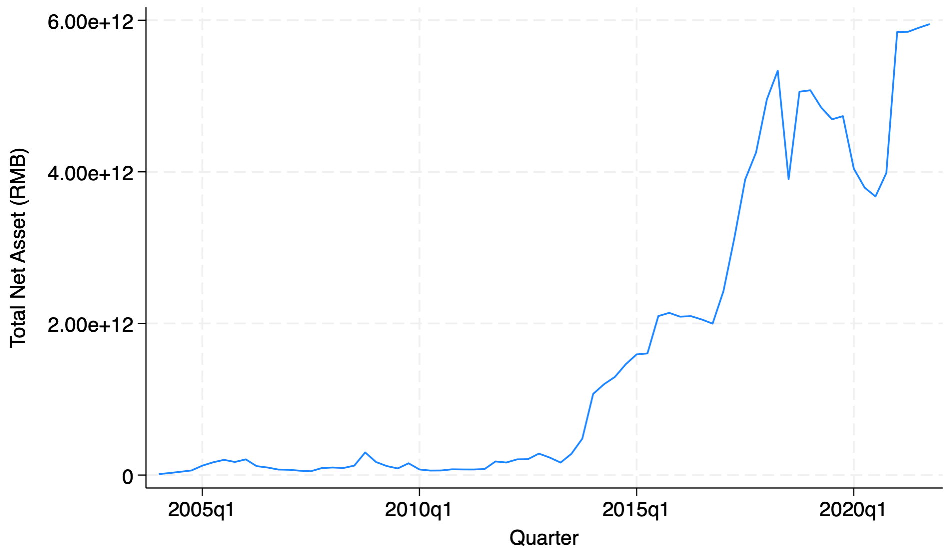
[25] Lawrence Schmidt, Allan Timmermann, and Russ Wermers. Runs on money market mutual funds. *American Economic Review*, 106(9):2625–2657, 2016.

[26] Adi Sunderam. Money creation and the shadow banking system. *The Review of Financial Studies*, 28(4):939–977, 2015.

[27] Wei Wang and Lin Li. Digital payment, money market fund and investment behavior. *Pacific-Basin Finance Journal*, 85:102348, 2024.

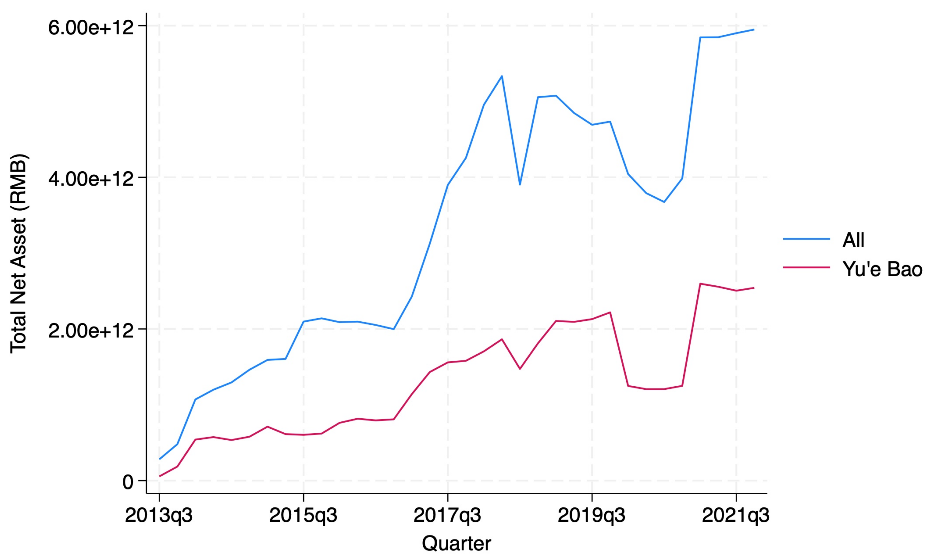
[28] Kairong Xiao. Monetary transmission through shadow banks. *The Review of Financial Studies*, 33(6):2379–2420, 2020.

Figure 1: The Size of China's MMF Industry



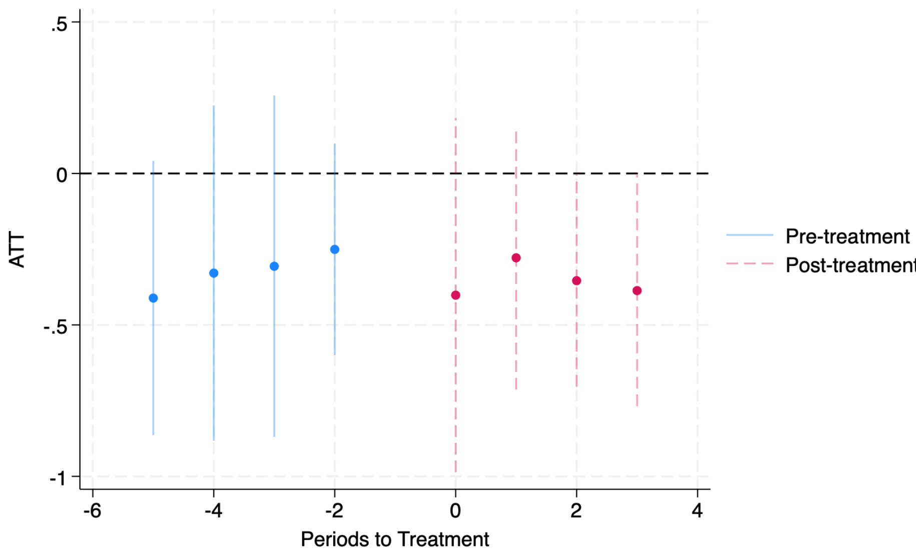
Note: This figure plots the time series of MMF size.

Figure 2: The Size Trend of Yu'e Bao MMFs



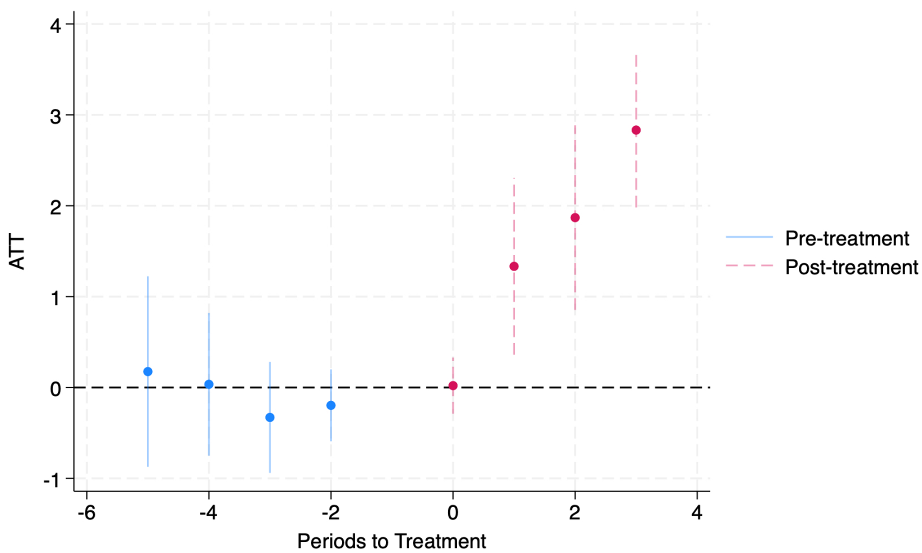
Note: This figure plots the time series of MMF sizes. Yu'e Bao funds are a subset of all funds. The red line represents the quarterly average Total Net Assets (TNA) of Yu'e Bao-related MMFs.

Figure 3: The effect of Yu'e Bao inclusion on investors' elasticities



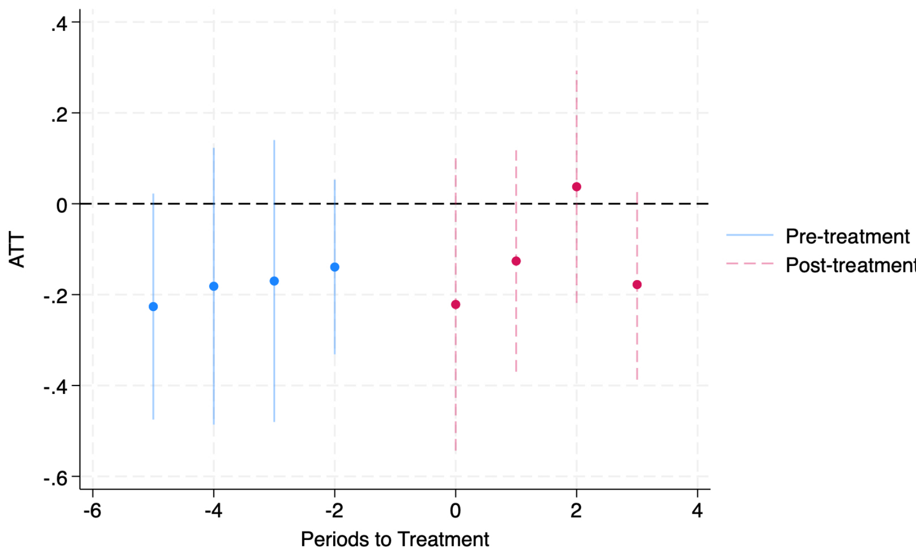
Note: The figure shows the estimates of treatment effects by length of Yu'e Bao inclusion for investor elasticities. This figure reports our estimates and 95% confidence intervals adjusted for multiple hypothesis testing of $\theta(4)$. The investor elasticities is estimated from (5). The value for one quarter before the Yu'e Bao inclusion is normalized to 0.

Figure 4: The effect of Yu'e Bao inclusion on fund size



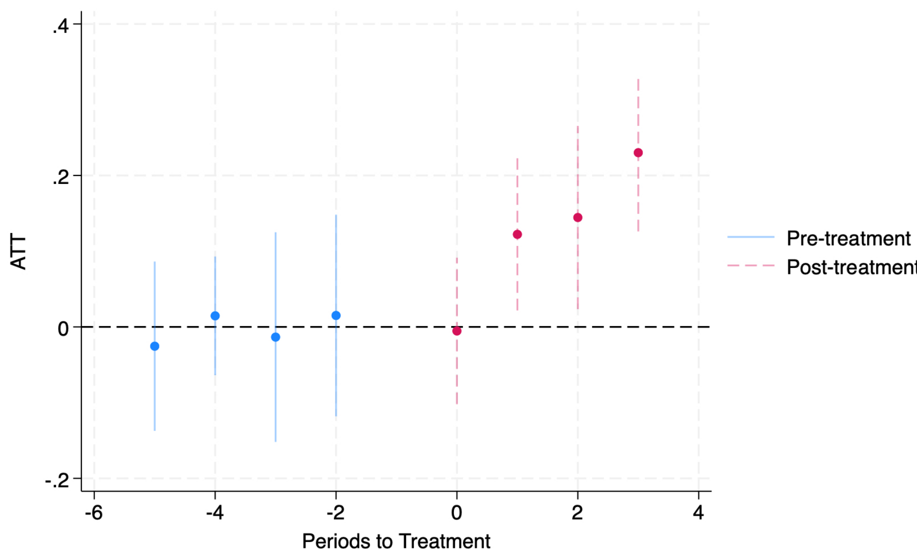
Note: The figure shows the estimates of treatment effects by length of Yu'e Bao inclusion for fund size. This figure reports our estimates and 95% confidence intervals adjusted for multiple hypothesis testing of $\theta(4)$. The fund size is ln(TNAs). The value for one quarter before the Yu'e Bao inclusion is normalized to 0.

Figure 5: The effect of Yu'e Bao inclusion on return



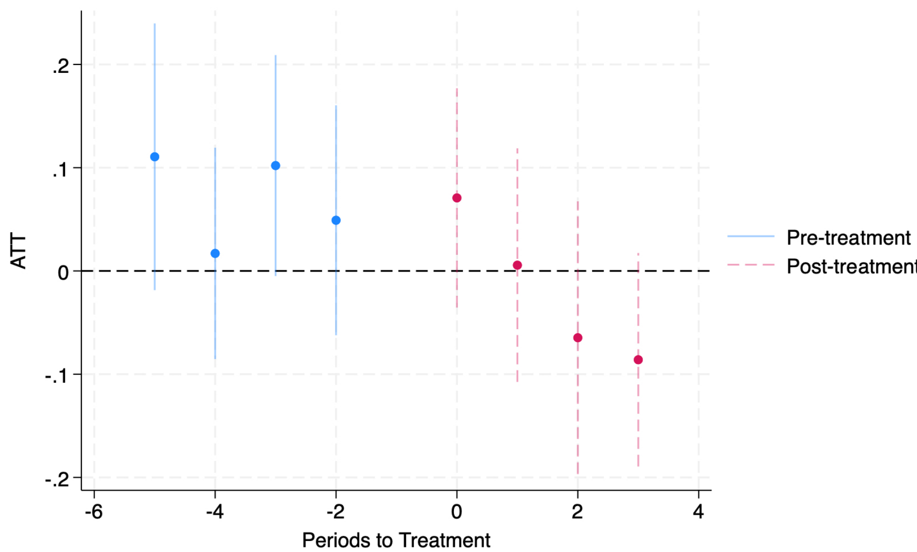
Note: The figure shows the estimates of treatment effects by length of Yu'e Bao inclusion for return. This figure reports our estimates and 95% confidence intervals adjusted for multiple hypothesis testing of $\theta(4)$. Return is the annualized return based on (1). The value for one quarter before the Yu'e Bao inclusion is normalized to 0.

Figure 6: The effect of Yu'e Bao inclusion on deposit share



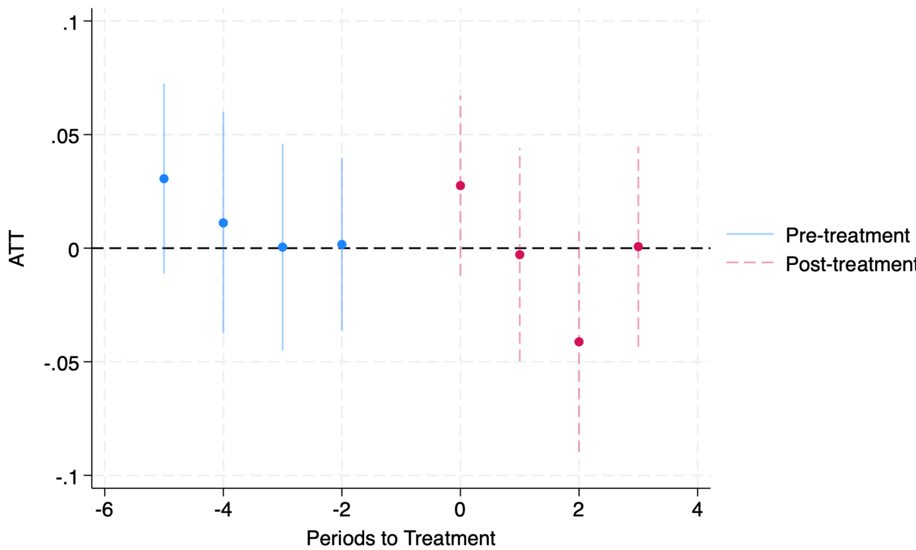
Note: The figure shows the estimates of treatment effects by length of Yu'e Bao inclusion for deposit share. This figure reports our estimates and 95% confidence intervals adjusted for multiple hypothesis testing of $\theta(4)$. The deposit share is the sum of bank deposits and reserves as a percentage of the fund's NAV. The value for one quarter before the Yu'e Bao inclusion is normalized to 0.

Figure 7: The effect of Yu'e Bao inclusion on bond share



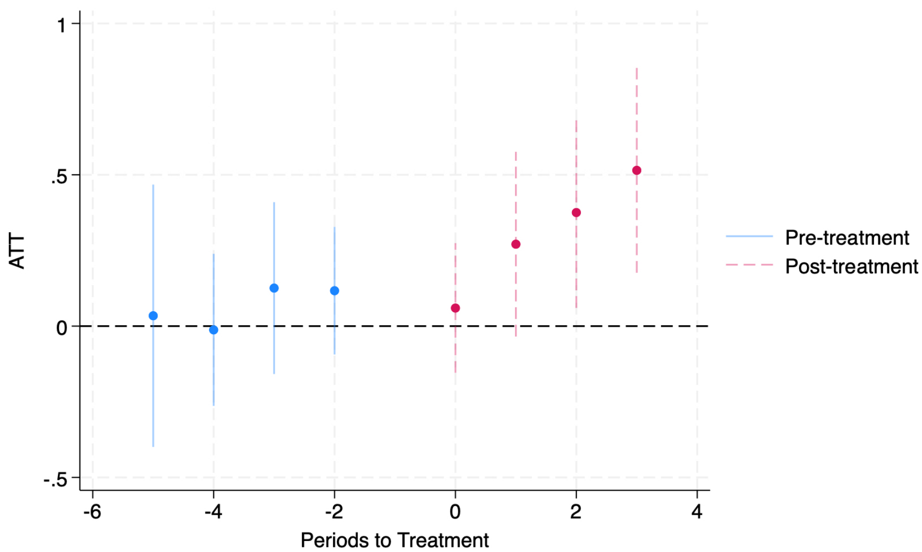
Note: The figure shows the estimates of treatment effects by length of Yu'e Bao inclusion for bond share. This figure reports our estimates and 95% confidence intervals adjusted for multiple hypothesis testing of $\theta(4)$. The deposit share is the sum of general government debt, corporate bonds, commercial papers and short-term notes as a percentage of the fund's NAV. The value for one quarter before the Yu'e Bao inclusion is normalized to 0.

Figure 8: The effect of Yu'e Bao inclusion on leverage



Note: The figure shows the estimates of treatment effects by length of Yu'e Bao inclusion for leverage. This figure reports our estimates and 95% confidence intervals adjusted for multiple hypothesis testing of $\theta(4)$. The deposit share is the sum of repurchase balance as a percentage of the fund's NAV. The value for one quarter before the Yu'e Bao inclusion is normalized to 0.

Figure 9: The effect of Yu'e Bao inclusion on asset maturity



Note: The figure shows the estimates of treatment effects by length of Yu'e Bao inclusion for asset maturity. This figure reports our estimates and 95% confidence intervals adjusted for multiple hypothesis testing of $\theta(4)$. The asset maturity is the value-weighted average maturity of the fund portfolio, calculated at the filing date. The value for one quarter before the Yu'e Bao inclusion is normalized to 0.

Table 1: Summary Statistics

	N	Mean	SD	Q10	Q50	Q90
Basic Information						
ln (Fund Size)	10,223	22.119	1.999	19.316	22.387	24.540
Annualized Return (%)	10,223	2.984	1.127	1.844	2.699	4.416
Annualized Spread (%)	10,223	1.136	0.796	0.399	1.038	1.970
Volatility of Annualized Spread	10,223	0.459	0.757	0.065	0.258	0.958
Fund Age	10,223	4.707	3.721	1.000	4.000	10.000
Asset Composition						
Fixed Income Share (%)	10,160	47.809	19.164	23.660	46.520	72.680
Deposit Share (%)	10,160	30.726	20.576	2.930	29.480	58.340
Fund Risk Taking						
Leverage (%)	10,188	8.355	5.742	1.440	7.440	16.890
Ln (Asset Maturity)	10,188	4.221	0.520	3.638	4.331	4.736
Asset Maturiy (Days)	10,188	75.757	31.306	37	76	114
Average Deviation (%)	10,188	0.069	0.070	0.009	0.044	0.165

Note: We report the summary statistics for the quarter-fund observations in our sample. The sample period is 2012Q1 to 2021Q4. The asset composition shares are computed as fractions of the fund's net asset value.

Table 2: Demand System Estimate

Variable	Random Coefficient		Logit
	Mean	SD	
Annualized Return	3.253***	2.984***	2.128***
	(0.019)	(0.223)	(0.538)
Yu'e Bao Inclusion	1.925***	0.051***	1.499***
	(0.047)	(0.009)	(0.255)
Volatility of Annualized Return	-1.115***		-0.035
	(0.305)		(0.047)
Size	0.400***		0.603***
	(0.072)		(0.044)
Age	0.692***		0.490***
	(0.193)		(0.171)
Leverage	-0.015**		-0.002
	(0.006)		(0.004)
Average Deviation	0.037		2.507***
	(0.759)		(0.483)
Number of obs	9,836		9,836
Fund Fixed Effect	Yes		Yes
Year-Quarter Fixed Effect	Yes		Yes

Note: We report the estimates of demand system. We control for fund and quarter fixed effect and cluster the standard errors at fund level. The heteroskedasticity-robust standard errors are reported in parentheses. $*p < 0.1$, $**p < 0.05$, $***p < 0.01$.

Table 3: Market Power and Risk-Taking

	Deposit	Bond	Leverage	Maturity
	(1)	(2)	(3)	(4)
Elasticity	-0.005**	0.010***	0.004***	-0.039***
	(0.002)	(0.002)	(0.001)	(0.008)
Asset Size	0.003	-0.014***	0.003**	0.058***
	(0.002)	(0.002)	(0.001)	(0.008)
Age	-0.010	0.009	0.002	-0.006
	(0.012)	(0.010)	(0.004)	(0.030)
Average Deviation	-0.192***	0.249***	0.045**	0.426***
	(0.039)	(0.036)	(0.018)	(0.109)
Deposit Share	-	-0.625***	0.040***	0.853***
	-	(0.016)	(0.007)	(0.053)
Bond Share	-0.709***	-	0.080***	1.308***
	(0.014)	-	(0.007)	(0.058)
Leverage	0.170***	0.298***	-	0.660***
	(0.029)	(0.026)	-	(0.081)
Maturity	0.094***	0.128***	0.017***	-
	(0.007)	(0.006)	(0.002)	-
Number of Obs.	9,812	9,812	9,812	9,812
Within R-squared	0.496	0.477	0.081	0.278
Fund Fixed Effect	Yes	Yes	Yes	Yes
Quarter Fixed Effect	Yes	Yes	Yes	Yes

Note: This table presents the univariate regression results for (14). We cluster the standard errors at fund level. $*p < 0.1$, $**p < 0.05$, $***p < 0.01$.

Table 4: Market Power and Risk-Taking

	Elasticity		Share		Return	
	(1)	(2)	(3)	(4)	(5)	(6)
Overall ATT	-0.355**	-	1.514***	-	-0.122	-
	(0.178)	-	(0.370)	-	(0.116)	-
-4	-	-0.328	-	0.035	-	-0.182
	-	(0.282)	-	(0.401)	-	(0.155)
-3	-	-0.306	-	-0.329	-	-0.170
	-	(0.288)	-	(0.311)	-	(0.158)
-2	-	-0.251	-	-0.196	-	-0.139
	-	(0.178)	-	(0.202)	-	(0.098)
0	-	-0.402	-	0.020	-	-0.222
	-	(0.298)	-	(0.158)	-	(0.164)
1	-	-0.278	-	1.333**	-	-0.126
	-	(0.222)	-	(0.496)	-	(0.124)
2	-	-0.354**	-	1.869***	-	0.037
	-	(0.178)	-	(0.518)	-	(0.130)
3	-	-0.387**	-	2.282***	-	-0.178*
	-	(0.195)	-	(0.434)	-	(0.107)

Note: $*p < 0.1$, $**p < 0.05$, $***p < 0.01$.

Table 5: Market Power and Risk-Taking

	Deposit		Bond		Leverage		Maturity	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Overall ATT	0.123**	-	-0.019	-	-0.004	-	0.305***	-
	(0.038)	-	(0.051)	-	(0.018)	-	(0.131)	-
4	-	0.015	-	0.017	-	0.011	-	-0.012
	-	(0.040)	-	(0.052)	-	(0.025)	-	(0.128)
3	-	-0.013	-	0.102	-	0.000	-	0.126
	-	(0.071)	-	(0.055)	-	(0.023)	-	(0.145)
2	-	0.015	-	0.049	-	0.002	-	0.117
	-	(0.068)	-	(0.057)	-	(0.019)	-	(0.108)
0	-	-0.005	-	0.071	-	0.028	-	0.060
	-	(0.049)	-	(0.054)	-	(0.020)	-	(0.109)
1	-	0.122**	-	0.006	-	-0.003	-	0.271*
	-	(0.051)	-	(0.058)	-	(0.024)	-	(0.156)
2	-	0.144**	-	-0.065	-	-0.041*	-	0.375**
	-	(0.062)	-	(0.067)	-	(0.025)	-	(0.161)
3	-	0.230***	-	-0.086	-	0.001	-	0.515**
	-	(0.053)	-	(0.053)	-	(0.023)	-	(0.173)

Note: $*p < 0.1$, $**p < 0.05$, $***p < 0.01$.

Table A1: The Eligible MMFs in Yu'e Bao

Fund Code	Fund Name	Time to included in Yu'e Bao
000198	Tianhong Yu'e Bao	2013/6/1
040038	Hua'an Daily Xin A	2018/5/1
050003	Bosera Cash Income A	2018/5/1
001211	Zhong Ou Gun Qian Bao A	2018/5/4
003515	Guotai Li Shi Bao	2018/5/28
000380	Invesco Great Wall Jing Yi Monetary A	2018/6/14
000559	Lion Fund Tian Tian Bao A	2018/7/9
001134	GF Tian Tian Li E	2018/7/16
180008	Yinhua Monetary	2018/8/6
090022	Da Cheng Cash Income Increase A	2018/8/27
161608	Rongtong Easy Payment Monetary A	2018/9/3
200003	Great Wall Monetary A	2018/9/17
001094	UBS SDIC Add Profit Treasure A	2018/9/26
150005	Galaxy Yin Fu Monetary A	2018/12/17
000575	Fullgoal Add Profit Treasure	2019/2/1
000710	Bank of Communications Cash Treasure A	2019/2/12
000505	China Life AMP Monetary A	2019/2/18
000424	Chang Sheng Tian Li Bao A	2019/2/18
519999	Chang Xin Interest Income A	2019/2/25
460006	Huatai-PineBridge Monetary A	2019/3/25
004097	The Agricultural Bank of China Daily Cash A	2019/4/9
000686	China Construction Bank Principal Jiaxinbao A	2019/5/13
000699	Bank of China Salary Wallet	2019/5/27
000509	GF Money Bag A	2019/7/1
000734	Bosera Daily Income Enhancement A	2019/7/1
000709	Huaan Cash Flow	2019/7/1
020031	Guotai Cash Management A	2019/8/5
260102	Invesco Greatwall Money Market A	2019/8/5
213009	Baoying Money Market A	2019/12/1