MANDATORY ADOPTION OF XBRL AND MUTUAL FUNDS FLOWS: EVIDENCE FROM CHINA

Jianguang Zeng, Ph.D.
Assistant Professor
School of Accounting, Southwestern University of Finance and Economics
Chengdu, China
School of Accounting and Finance, The Hong Kong Polytechnic University
Hong Kong
zengjg@swufe.edu.cn

Lina Wu, Ph.D.
Associate Professor
Guanghua School of Management, Peking University
Beijing, China
wln@gsm.pku.edu.cn

Jia-Lang Seng*, Ph.D.
Distinguished Professor
Dept and Graduate School of Accounting
College of Commerce, National Chengchi University
Taipei, Taiwan
seng@nccu.edu.tw

*corresponding author

MANDATORY ADOPTION OF XBRL AND MUTUAL FUNDS FLOWS: EVIDENCE FROM CHINA

ABSTRACT

This paper investigates the association between the mandatory adoption of XBRL (eXtensible Business Reporting Language) and mutual funds flows. Based on a sample from mutual funds in China for the period from 2007 to 2013, we provide empirical evidence on the decreased agency costs with the role of XBRL financial reporting standards to reduce information asymmetry. Our results show that the XBRL adoption is significantly negatively associated with mutual funds flows. Our results further indicate that the mandatory adoption of XBRL may lead to more reduction of mutual funds flows for firms with poorer corporate governance than those with better corporate governance. Overall, our findings suggest that information symmetry and transparency is vital to tackle the issue of agency costs in the emerging markets and shed light on the role played by XBRL as a global standard to facilitate business information supply chain around the world.

KEYWORDS: Agency costs; business information supply chain; disclosure quality; eXtensible Business Report Language (XBRL); information asymmetry; information transparency; mutual funds flows; redemption anomaly

MANDATORY ADOPTION OF XBRL AND MUTUAL FUNDS FLOWS: EVIDENCE FROM CHINA

1. INTRODUCTION

China's capital market debuted in the 1990s. Since 1991, China has adopted a number of investment mechanisms such as stocks, mutual funds, and futures to boost its capital market (Allen, 2001; Arnold et al., 2008). At the same time, low liquidity and irregular operation have troubled the emerging market. The China Securities Regulatory Commission (CSRC) has strongly regulated the market since the mid-1990s (Cornell and Roll, 2005). In 1998, China focused on the development of the funds industry and adopted international experience from advanced capital markets. China's authority further imposed stronger regulation and enforcement on mutual funds at the turn of the century (Lu et al., 2007; Liu, 2009; Li et al., 2011). In 2000, the CSRC issued the first pilot scheme to start open-end mutual funds, which shows China's strong intention to achieve a historic leap in the funds market. Since then, the funds industry has entered a fast growing and rapidly changing phase of development. The funds industry has started to operate in a wide range of businesses, from closed-end funds, public funds, pension funds, corporate pensions, and QDII funds management, to account management and investment advisory services.

However, there was a sharp shrinkage in the funds industry between 2008 and 2013 as the net assets and shares decreased unexpectedly, according to a Huaan Innovation research report. That is the first sign showing the rapid decline in the funds market. Academia and industry have blamed the phenomenon in particular on the increasing redemption anomaly, where the net purchase flows decrease and the net fund redemptions increase. The phenomenon is consistent with what prior literature

reports about the high agency costs in China's funds market since the mid-2000s (e.g., Fama and Jensen, 1983; Lu et al., 2007; Li et al., 2011; Xiao and Shi, 2011).

(Table 1 goes about here)

China's authorities understand that they must modernize and standardize the capital market quickly to remedy the situation (e.g., Lu et al., 2007; Li et al., 2011; Xiao and Shi, 2011). One of the important decisions the CSRC has made is to promote a more transparent financial reporting system which can better oversee the market, attract more investors, and link China's market to the global economy. In 2009, the CSRC mandated the adoption of eXtensible Business Reporting Language (XBRL) to streamline and standardize the business information supply chain of the funds market.

The CSRC required full adoption of XBRL for all funds' daily, weekly and quarterly financial reports, annual reports, net worth information, and interim bulletins (http://fund.csrc.gov.cn). XBRL became the only and official format for financial and business information. The CSRC also provided a free online XBRL browser to enable easy and timely access. The adoption of XBRL has greatly reduced information asymmetry, information collection costs, and information analysis efforts.

Accordingly, the mandatory adoption of XBRL provides us a natural environment for an empirical study. In this paper, we investigate whether the mandatory adoption of XBRL standards in China' funds market will lead to an effective resolution to issues related to agency costs and mutual fund flows. We explore the root cause of agency causes and alternatives to these costs which are not adequately addressed in Fama and Jensen (1983). We collect our data from the China

Security Market and Accounting Research (CSMAR) mutual funds databases in the period from 2007 to 2014. Our findings show that overall, the funds firms' net flows decrease in the post-mandatory-adoption period compared to the pre-mandatory-adoption period. However, when we examine the relation between corporate governance and mutual funds flows, the firms' net flows increase with good corporate governance in the post-mandatory-adoption period.

Our results suggest that rational investment behavior prevails in China, as argued in agency theory, i.e. the more transparent the information available, the less the information asymmetry. Our findings also show that information transparency is vital to the mitigation of the redemption anomaly in the funds market. Furthermore, our findings shed light on the high agency costs. Financial disclosures with XBRL standards can effectively address the issue of agency costs.

We organize the remainder of this paper as follows. In Section 2, we discuss the institutional background and literature review to develop our hypotheses. We describe the research design in Section 3. In Section 4, we present the main results. We conclude in Section 5 with discussions.

2. INSTITUTIONAL BACKGROUND, LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Mutual Funds in China

In 1991, the Zhuxin fund was established, marking the establishment of investment funds (the prototype of closed-end funds) in China. In the next year, the People's Bank of China Shenzhen Special Economic Zone Branch issued *Shenzhen Investment Trust Fund Management Provisional Rules,* which stated the local laws and regulations for the investment funds companies. In 1993, the People's Bank of China successively approved a large listing of modern funds in the Shenzhen Stock

Exchange (SZSE) and the Shanghai Stock Exchange (SSE), which included the nationwide investment funds market. Between 1993 and 1995, there was no release of domestic funds. In 1996, the SZSE restarted the nationwide compilation of an index of funds. Between 1991 and 1997, the mutual funds companies were small and poorly operated. Fund managers were searching for a way in the darkness.

In 1997, China issued the first mutual funds law, called the *Interim Method for Administration of Securities Investment Funds*. China tried to set a new stage for the funds market. In 2000, in order to control the chaotic insider trading, China's authority issued the *Pilot Measures for Open-end Securities Investment Funds*. In 2001, the Securities Association of China (SAC) Fund Association issued the *Securities Investment Funds Industry Convention* with the purpose of strengthening the self-discipline of securities investment funds companies. The new *Law of the People's Republic of China on Securities Investment Fund* was brought into effect on June 1, 2004.

Qian (2006) reports evidence of the abnormal redemptions and finds it is due to information asymmetry and high agency costs, which is consistent with prior studies (Pistor and Wellons, 1999; Pistor and Xu, 2005; Cai and Song, 2010). Some literature provides insights into the unique phenomenon. Spitz (1970), Smith (1978), Ippolito (1992), and Tufano and Sevick (1997) document that net flows are sensitive to fund returns. Redemption occurs when returns decline. Tuttle and Kershaw (1998) argue that the submission pattern of information can significantly influence the cognitive efforts of investors. Frownfelter-Lohrke (1998) holds that different submission patterns can influence the investment decisions of investors.

2.2 eXtensible Business Reporting Language (XBRL)

XBRL is an XML-based technique that was proposed in the late 1990s to early 2000s in the U.S. with the expectation that it would increase the usability and integration of financial reporting information (Apostolou and Nanopoulos, 2009; Davis, 2010; Bartley et al., 2011; Alles and Piechocki, 2012). It is considered a global revolutionary technology for the electronic communication of business and financial data that has transformed business reporting intra- and inter-organizationally around the world (Cox, 2006; Cox, 2007).

As all the financial reporting elements are standardized through a widely accepted taxonomy (i.e., a dictionary of the terms used in financial reports) and are separated from its format, XBRL adoption is expected to benefit all members of the financial information supply chain by increasing the comparability of financial reports across firms in the same industry, analyzing such information automatically, and making information exchangeable between different applications (Debreceny et al., 2002; Debreceny et al., 2005; Debreceny et al., 2010; Debreceny et al., 2011). In particular, XBRL-enabled business data is computer-readable and searchable and users can download it directly into analytical software. As a result, it is expected to improve accessibility, interoperability, disclosure, and transparency for the adopting organizations.

In addition, XBRL is expected to facilitate the integration of different items in financial reports, even in cases when such a link does not exist explicitly and could not be found easily before. Because of this integration of information, it has become easier for users to observe management's disclosure decisions as well as the motivation for such decisions. Furthermore, XBRL can potentially reduce professional users' (e.g., analysts) cognitive costs and non-professional users' information processing costs. Last, XBRL has made information more readily

accessible across countries based on its multi-language and multi-GAAP (Generally Accepted Accounting Principles) converting capabilities. International organizations view XBRL as a key enabling financial-reporting technology to help them differentiate themselves from their competition in the global capital markets (Dunn and Gerard, 2001; Glaeser et al., 2001).

Zabihollah et al., (2001) documents that, after adopting XBRL, financial statements are more accurate and more reliable. Jones and Willis (2003) report that XBRL can improve the efficiency of investment decisions by improving the accuracy of financial data. XBRL provides information users with standard financial data for which are conducive to and cost effective for commercial information compilation, analysis, and communication (Arnold et al., 2008). Hodge et al. (2004) find that the adoption of XBRL helps reveal hidden information. By using XBRL technology, investors can more quickly and easily obtain and integrate information of high quality.

Given the potential benefits and cost effectiveness of making financial reporting more transparent to the public by reducing the information processing costs, China has rapidly leveraged knowledge from the U.S. and Europe to develop its own taxonomies and applications in mutual funds reporting. In particular, the CSRC began the electronic reporting program for its funds industry based on XBRL standards in 2009. There is no obvious time lag between the pilot firms and other firms in terms of the adoption. None of these filings (both the pilot and others) are publicly available. This regulatory change provides a natural experiment context for studying the relation between mutual funds' pre- and post-adoption flows and redemptions.

2.3 The Development of XBRL in China

China was the first country that, in 2004, formally and mandatorily adopted XBRL. Early 2003, the Shanghai Security Exchange (SSE) and the Shenzhen Stock

Exchange (SZSE) began an electronic reporting program for their listed firms' financial reports based on XBRL standards. However, not until early 2006 and 2009 respectively could the public search for a complete list of XBRL-formatted reports.

As the CSRC deputy director pointed out in a national meeting, "With the rapid development of funds industry, the growing number of funds provided to fund investors; the massive amount of fund information prevents investors from effectively having the right information at the right time. It is serious and imperative for us to improve the information transparency issue. The adopting of XBRL technology enables (1) the electronic exchange of information, (2) easy access, (3) timely analysis, and (4) intelligent integration of market information." XBRL technology facilitates information transparency and a high quality of corporate disclosure, which in turn reduces agency costs and the fund redemption anomaly.

2.4 Agency Costs

The concept of agency theory has been used in the capitalist world since the early 1990s. Agency theory can be divided into normative and positive approaches. The normative approach presents a mathematical presumption on the basis of the neo-classics, whereas the positive approach is neither mathematical nor empirical, but descriptive. Whenever one individual depends on the action of another, an agency relationship arises. The individual taking the action is called the agent. The affected party is the principal (Jensen and Meckling, 1976; Jensen et al., 1976; Jensen, 1986; Jensen, 1993; Javier Gil-Bazo et al., 2010; Climent and Soriano, 2011; Barreda-Tarrazona et al., 2011). The shareholder employs the manager to act in his or her interest, namely to increase the value of the firm. Agency theory, when applied to the study of the modern capital market, focuses primarily on the problematic relationship between shareholders and managers that has arisen through the separation

of ownership and control.

There are three ways of reducing agency problems (Jensen and Meckling, 1976; Brennan and Li, 1993; Javier Gil-Bazo et al., 2010; Climent and Soriano, 2011; Barreda-Tarrazona et al., 2011): reduction of information asymmetry, harmonization of the goals of principals and agents, and trust building. Both screening and signaling serve to reduce the information asymmetry ex ante. To counter agency problems after signing a contract, the agent could set up reporting systems, and the principal could establish monitoring systems. Furthermore, central to principal-agent theory are the so-called agency costs (Jensen and Meckling, 1976; Fama and Jensen, 1983; Ferris and Yan, 2009). Monitoring costs are costs borne by the principal for observing and supervising the agent.

Academics, industry critics, and regulators generally agree that the long time scandals at dozens of mutual funds families in China can be seen as a manifestation of agency costs between mutual funds companies and mutual funds shareholders (Brennan and Li 1993; Cornell and Roll 2005; Jensen 1986; Jensen 1993). While fund shareholders desire high, risk-adjusted returns at low cost, fund companies wish to maximize the level of assets under management and the associated management fees. What remain unrecognized in the literature are the resolution and the possible resolutions (Ross, 1973; Hölmstrom and Weiss, 1985; Allen, 2001; Menkhoff, 2002; Nanda et al., 2004).

2.5 Hypothesis Development

As discussed above, mutual funds operate because principles entrust assets to agents who, as a result, gives rise to agency costs between principles and agents. Principles redeem their own shares at will at any time, with the most extreme case being full redemption. Such s situation deemed as bankruptcy liquidation. Hence,

redemption serves as a way to price the agency costs (La Porta et al., 1997; La Porta et al., 1998; Levine, 1999).

Since the pilot project of XBRL adoption by six big mutual funds companies in 2008, the CSRC has launched its only official website (http://fund.csrc.gov.cn) to promote the XBRL implementation. Investors are able to secure a comprehensive understanding of operational and timely performance information. The XBRL adoption offers investors comprehensive financial disclosures and comparable and searchable funds' performance information. Accordingly, the decreased information asymmetry and increased information transparency enabled by XBRL reduce agency costs and intensify fund redemption (Pistor and Xu, 2005; La Porta et al., 1997; 1998; Levine, 1999; Hölmstrom, 1979). Therefore, we put forward the first hypothesis as follows:

H1: The mandatory adoption of XBRL reduces the mutual funds inflow into a funds market which has high agency costs.

Next, though the adoption of XBRL ensures investors and regulators a higher utilization, comparability, and consistency of funds information, XBRL alone cannot totally change management behavior, especially the opportunistic behavior of fund managers. Revisiting corporate governance, the self-management and peer review mechanism helps the changes to be realized (Ross, 1973; Hölmstrom and Weiss, 1985). Therefore, we put forward the second hypothesis as follows:

H2: The effect of the mandatory adoption of XBRL on reducing the mutual funds inflow is stronger for the mutual funds with poor corporate governance than for

mutual funds with good corporate governance.

To test the hypothesis above, this study adopts the methods of Sirri and Tufano (1998), Qian (2011), Xiao and Shi (2011), and Li et al. (2011) and creates a fixed effect unbalanced panel data regression model, which is described in the following section.

3. RESEARCH METHOD

3.1 Data and Variables

We gather the data for this study from the China Security Market and Accounting Research (CSMAR) database. The CSMAR database is the world largest and the leading provider of China's financial market data as well as China's industry and economic data to international financial and educational institutions. CSMAR provides 11 modules of historical data and 77 databases regarding the stock market, corporate profiles, the funds market, the bonds market, the derivatives market, the money market, the economy and industry, and others. The data for this study comes from the following two databases: China funds market and China funds market indicators. Our sample includes all the mutual funds companies in China. We collect the corresponding variables from 2007 to 2014 as detailed below (see Table 2 for sample selection).

(Table 2 goes about here)

Our sample starts in 2007 when IFRS (International Financial Reporting Standards) were adopted. To approach our research questions, we consider the performance measure that is commonly used in prior literature: net capital inflow of

funds (*NETFLOWIN*), also called net mutual funds flows and subscriptions (see Table 3 for variable definitions).

We use a dummy variable, *XBRL*, to capture the XBRL adoption year, which helps us distinguish between the flows before and after the mandatory adoption. *XBRL* is 0 when the sample year is before (including) 2008 and 1 when it is after (including) 2009.

We also control for the following variables that may affect a mutual funds company's performance, as in prior literature. First, we control for the proportion of institutional investor accounts (namely, *INSTHOLD*), which has been shown to be highly related to net capital inflows of funds at time *t*. Second, we control for fund characteristics that are also highly related to net capital inflow of funds at time *t*: dividend frequency in previous periods (*DIVFREQ*, for funds *i* at time *t*), dividend quantity in previous period (*DIVSUM*, for funds *i* at time *t*), and revenue volatility in previous period (*RETSTD*, for funds *i* at time *t*).

Third, we further control for management and custodian fees (*FEE*) as proxies of a mutual funds' governance mechanism, the family size of funds in a mutual funds company in previous period (*PREFTASSET*), and the natural logarithm of the net assets of funds (*NETASSET*).

Last, we control for the characteristics of fund managers that are related to net capital inflow of funds at time *t*: tenure of the fund manager (*TENURE*), whether a fund manager is female (*FEMALE*), educational background (*EDU*), and work experience (*EXPERIENCE*). We further use a dummy variable (*YEAR*) to capture the year of observation, which helps us distinguish between the funds flow over time.

(Table 3 goes about here)

We winsorize the top and the bottom 1% of the distribution of the observations in the analysis. The resulting sample has 246 mutual funds and 3409 fund- semi-annual and annual observations after eliminating the missing values. The increase in the number of fund semi-annual and annual observations reflects the government's policy toward a more efficient funds market.

The descriptive statistics for the variables are given in Table 4. In Table 4, we see that the average *NETFLOWIN1* of mutual funds is 0.029 with a median of -0.025, indicating that the net subscription rate for most funds companies is negative in China's funds market. In other words, the redemption phenomenon is quite serious. On average, the volatility of earnings (*RETSTD*) in the previous period is 1.370 with a median of 1.290, showing a minor difference in income level among mutual funds companies. Overall, the total assets of the family of funds in the previous period (*PREFTASSET*) have an average of 23.932 with a median of 24.102, indicating that the total assets of funds family are similar in size and scale.

(Table 4 goes about here)

To investigate the impact on mutual funds companies before and after their mandatory adoption of XBRL, we run the descriptive statistics for each variable (see Table 4). We can see from the results in Table 4 that for almost every variable the difference between before and after mandatory adoption is significant. The results suggest that the effect of the XBRL mandatory adoption on mutual funds is natural and evident.

To show the impact of *XBRL* on the mutual funds companies, we report the

correlations in Table 5. We can see from the results in Table 5 that XBRL has a significantly negative correlation with fund inflow.

(Table 5 goes about here)

3.2 Econometric Model

We use the following regression model based on Sirri and Tufano (1998), Qian (2011), Xiao and Shi (2011), and Li et al. (2011) to test our hypotheses with the variables mentioned above. We investigate the association between the mandatory adoption of XBRL and the net flows of mutual funds in general as in Equation (1).

$$\begin{aligned} NETFLOWIN = {} & \beta_0 + \beta_1 \text{XBRL} + \beta_2 \text{XBRL} \times \text{FEE} + \beta_3 \text{INSTHOLD} \\ & + \beta_4 \text{DIVFREQ} + \beta_5 \text{DIVSUM} + \beta_6 \text{RETSTD} \\ & + \beta_7 \text{RETURN} + \beta_8 \text{FEE} + \beta_9 \text{PREFTASSET} + \beta_{10} \text{NETASSET} \\ & + \beta_{11} \text{TENURE} + \beta_{12} \text{FEMALE} + \beta_{13} \text{EDU} + \beta_{14} \text{EXPERIENCE} + \sum \text{YEAR} + \xi \end{aligned} \quad (1)$$

Definitions of the variables in Equation (1) are shown in Table 2. We measure net mutual funds inflows with $NETFLOWIN_{i,t}$, by adopting the practice of Sirri and Tufano (1998), Qian (2011), and Xiao and Shi (2011), defined as:

$$NETFLOWIN_{i,t} = \frac{\text{Purchase}_{i,t} - \text{Redemption}_{i,t}}{Total\text{FundShare}_{i,t-1}} \quad (a)$$

$$NETFLOWIN_{i,t} = \frac{\text{Purchase}_{i,t} - \text{Redemption}_{i,t}(1 + r_{i,t})}{Total\text{FundShare}_{i,t-1}} \quad (b)$$

$$NETFLOWIN_{i,t} = \frac{TotalNetAsset_{i,t} - TotalNetAsset_{i,t-1}(1 + r_{i,t})}{TotalNetAsset_{i,t-1}} \quad (c)$$

where $Purchase_{i,t}$ is the current purchase of fund shares, $Redemption_{i,t}$ is the current redemption of fund shares, and $TotalFundShare_{i,t-1}$ is the total fund shares of

the previous period's funds. $TotalNetAsset_{i,t}$ is the current total net assets of funds, and $TotalNetAsset_{i,t-1}$ is the total net assets of the previous period's funds. The net subscription rate of funds, $NETFLOWIN_{i,t}$, has a positive value, while the redemption of funds, $NETFLOWIN_{i,t}$, has a negative value. The standard rate of return for funds for the previous three months is $r_{i,t}$.

First, all the models are estimated by controlling for fund-year effect as in Petersen (year) to avoid inflated *t* for the panel data. β_1 is expected to be negative for mandatory filers as stated in Hypothesis 1. Second, Equation (1) is applied to all observations. According to Hypothesis 2, a significant positive β_2 for mutual funds mandatory filers is expected. As mentioned, we further explore the effect of XBRL given the performance measures by using Equation (1) as stated in Hypothesis 2. From Hypothesis 2, we expect to see a significant and positive β_1 for the mandatory filers of mutual funds.

4. EMPIRICAL RESULTS

4.1 Main Results

Our results are given in Table 6. Table 6 uses the fixed effect regression model for the dependent variable *NETFLOWIN*. The added independent variables are the percentage of institutional investors (*INSTHOLD*), the current fund performance (*FUNDCAR*), and the multiplication of XBRL mandatory adoption (*XBRL*) by these independent variables.

Model 1, Model 3, and Model 5 in Table 6 show the results for Hypothesis 1. In these models, our results suggest that *XBRL* is significantly negative across all the models for *NETFLOWIN*. That is, compared to the net flows of mutual funds companies before XBRL adoption, the post-adoption fund redemptions are higher,

which supports our first hypothesis. That is, the more transparent and accessible the information, the more likely that fund redemption will occur in the post-mandatory-adoption period.

To further examine the results reported in Table 6, we find that *XBRL* × *FEE* is significantly positive for *NETFLOWIN* in Model 2, Model 4, and Model 6. These results suggest that the better the mutual funds governance is, the more likely it is for increased net flows to occur.

(Table 6 goes about here)

4.2 Additional Analysis

Similarly, Table 7 uses the fixed effect regression model and has ten models of ordinal measures. To examine the effect of fund performance, we divide fund performance into the top 10%, the bottom 10%, and the middle group. Again, these six independent variables are added to the basic model one at a time to result in ten models. These added independent variables are the current and prior fund performance rankings (*CAPMDOG, CAPMMIDDLE, CAPMSTAR, PRECAPMDOG, PRECAPMMIDDLE, PRECAPMSTAR*), and their multiplication by the mandatory XBRL adoption (*XBRL*).

As mentioned above, in 2008, the CSRC introduced a pilot project in which six mutual funds companies were chosen to implement XBRL. All other mutual funds companies adopted XBRL in 2010. We perform the following analyses to further validate our main results. First, we control for the effect of the early adoption of XBRL in 2008. We examine the pre- and post-adoption of XBRL for one year. Second, we control for the effect of pre- and post-adoption of XBRL for the following three

years, 2010 through 2012. We use a DID (Difference in Difference) model as in Table 7. That is, 2010 and the years after are the post-adoption group, and 2009 and the years before are the pre-adoption group. In Table 7, Model 1 and Model 3 show that the results of the early adoption of XBRL (*FIRSTXBRL*) are significantly associated with *netFlowIn*, and Model 2 and Model 4 show that the multiplication of XBRL and the mandatory adoption of XBRL (*FIRSTXBRL* × *XBRL*) are not significantly associated with *netFlowIn*. That is, overall, *netFlowIn* decreases in the post-adoption period whereas *netFlowIn* increases when the mutual funds governance (*INSTHOLD*) is better and the fund performance (*CAPMMIDDLE*) is above the average. Our main results hold for all mandatory filers. They support Hypothesis 1 and Hypothesis 2.

(Table 7 goes about here)

In results not reported, we repeat the entire analysis including (1) raw measures and ordinal measures with cumulative past-24-month fund returns, (2) raw measures and ordinal measures with the Fama-French (1993) three-factor model using past-24-month fund returns, (3) ordinal measures with the top five (twenty) percent, 5%-95% (20%-80%) and the last five (twenty) percent using cumulative fund returns and the Fama-French (1993) three-factor model, and (4) adding one lagged inflow. These differences had no meaningful impact.

(Table 8 goes about here)

5. CONCLUSION AND DISCUSSIONS

As discussed above, Jensen and Meckling (1976) put forward the agency

problems that are known in the capitalist economy worldwide as proxy issues. Academia and industry have tackled the issues in a variety of aspects and for a long time. In China's funds industry, because of the late start and special structure, agency problems have multiplied and become muddled in a complicated manner. As noted in Fama and Jensen (1983), mutual funds can be foreclosed as a vital form of addressing agency costs in developed capital markets. Such foreclosure, known as the redemption anomaly, is serious in China's mutual funds.

XBRL is considered a global revolutionary technology that electronically communicates financial reporting information. It is expected to improve the re-usability of financial reporting information by improving accessibility and transparency of the adopting organizations. Such characteristics have drawn the attention of regulators worldwide. Through the adoption of XBRL, regulators hope to increase corporate accountability and financial reporting transparency, leading to a better managed and developed financial market and corporate operation. In light of the potential benefits brought by XBRL, Chinese authorities have mandated that XBRL be the only official form of financial information in the funds industry since 2009.

In this paper, we point out that timely, accessible, and searchable financial information is an effective alternative to the problem of agency costs. Mandatory XBRL adoption mitigates information asymmetry and lowers information collection costs to certain extent, which in turn resolves the problem of agency costs. With mutual funds' corporate governance in mind, investors showing the rationality of capitalism purchase more funds. Consequently, we hypothesize that mutual funds will suffer from greater redemption and a decrease in net flows because of information transparency and lower information collection costs. However, considering corporate

governance, our findings show that mutual funds are more likely to have increased net flows when they have better corporate governance in the post-adoption period. Our findings are consistent with the hypothesis that agency problems are more acute in mutual funds with poorer corporate governance. Our results provide insight into the post-mandatory-adoption performance of globally adopted financial reporting standards. Such insights are valuable for local and global market participants in China when using the XBRL-enabled financial information, which plays a role in facilitating the supply of business information around the world.

REFERENCES

Allen, F. (2001). Do financial institutions matter? *Journal of Finance, 56*, 1165-1175.

Alles, M., and Piechocki, M. (2012). Will XBRL improve corporate governance?: A framework for enhancing governance decision making using interactive data. *International Journal of Accounting Information Systems, 13 (2)*, 91-108.

Apostolou, A. K., & Nanopoulos, K. A. (2009). Interactive financial reporting using XBRL: An overview of the global markets and Europe. *International Journal of Disclosure and Governance, 6 (3)*, 262-272.

Arnold, M. W., Botosan, C. A., & Colson, R. H. (2008). Response to the progress report of the sec advisory committee on improvements to financial reporting. *Accounting Horizons, 22(4)*, 471-494.

Barreda-Tarrazona, I., Matallı´n-Sa´ez, J. C. & Balaguer-Franch, M. (2011). Measuring investors' socially responsible preferences in mutual funds. *Journal of Business Ethics*, 103:305-330.

Bartley, J., Chen, A. Y. S., & Taylor, E. Z. (2011). A comparison of XBRL filings to corporate 10-Ks - Evidence from the voluntary filing program. *Accounting Horizons, 25 (2)*, 227-245.

Brennan, M. J., & Li, F.(1993). Agency and asset pricing. University of California, Los Angeles (UCLA) Working Paper.

Cai, Q. & Song, Y. (2010). Can the hyper -normal development of institutional investors stabilize the market?-leapfrog development of china's funds industry. *Economic Research, 1*, 90-101.

Capon, N., Fitzsimons, G. J., & Prince, R. A. (1996). An individual level analysis of the mutual fund investment decision. *Journal of Financial Services Research, 10*, 59-82.

Climent, F. & Soriano, P. (2011). Green and Good? The investment performance of us environmental mutual funds. *Journal of Business Ethics*, 103:275-287.

Cornell , B., & Roll, R.(2005). A delegated-agent asset-pricing model. *Financial Analysts Journal, 61*, 57-69.

Cox, C. (2007). Address to the 16th XBRL International Conference. (available at http://www.sec.gov/news/speech/ 2007/spch120307cc.htm).

Cox, C. (2008). Videotaped Remarks at the 17th XBRL International Conference. (available at http://www.sec.gov/news /speech/2008/spch050708cc-2.htm).

Davis, C. (2010). China leads the XBRL revolution. *Accountancy Futures, 2010*, 68-70.

Debreceny, R. S., Farewell, S. M., Piechocki, M., Felden, C., Gräning, A., & d'Eri (2011). A. Flex or break? Extensions in XBRL disclosures to the SEC. *Accounting Horizons, 25 (4)*, 631-657.

Debreceny, R., Farewell, S., Piechocki, M., Felden, C., & Gräning, A. (2010). Does it add up? Early evidence on the data quality of XBRL filings to the SEC. *Journal of Accounting and Public Policy, 29 (3)*, 296-306.

Debreceny, R., Gray, G. L., & Rahman, A. (2002). The determinants of Internet financial reporting. *Journal of Accounting and Public Policy, 21 (4)*, 371-394.

Debreceny, R.S., Chandra, R. A., Cheh, J.J., Guithues-Amrhein, D., N.J. Hannon & Hutchison, P.D.(2005). Financial reporting in XBRL on the SEC's EDGAR System: a critique and evaluation. *Journal of information System, 19(2)*, 191-210.

Dunn, C., & Gerard, G. J. (2001). Auditor efficiency and effectiveness with diagrammatic and linguistic conceptual models. *International Journal of Accounting Information Systems, 1(2),* 79-87.

Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *The Journal of Law and Economics, 26*, 327-349.

Ferris, S. P., & Yan, X. (2009). Agency costs, governance, and organizational forms: Evidence from the mutual funds industry. *Journal of Banking & Finance, 33*, 619-626.

Frownfelter-Lohrke, C. (1998). The effects of differing presentations of general purpose financial statements on users' decisions. *Journal of Information Systems, 12(2)*, 99-107.

Glaeser, E., Johnson, S., & Shleifer, A. (2001). Coase versus the coasians. *Quarterly Journal of Economics, 116*, 853-899.

Gray, G. L., & Miller, D. W. (2009). XBRL: Solving real-world problems. *International Journal of Disclosure and Governance, 6(3)*, 207-223.

Greene, J., Hodges, C., & Ratkowski, D. (2007). Daily mutual fund flows and redemption policies. *Journal of Banking and Finance, 21*, 3822-3842.

Hodge, F. D. (2001). Hyperlinking unaudited information to audited financial statements: Effects on investor judgments. The *Accounting Review, 76(4)*, 675-691.

Hodge, F. D., Kennedy, J. J., & Maines, L. A. (2004). Does search-facilitating technology improve the transparency of financial reporting? *The Accounting Review, 79(3)*, 687-703.

Hölmstrom, B. (1979). Moral hazard and observability. *The Bell Journal of Economics, 10*, 74-91.

Hölmstrom, B. , & Weiss, L.(1985). Managerial incentives, investment and aggregate implications. *Review of Economic Studies, 52*, 403-426.

Ippolito, R. A. (1992). Consumer reaction to measures of poor quality: evidence from

the mutual funds industry. *Journal of Law and Economics, 35*, 45-70.

Javier Gil-Bazo, J., Ruiz-Verdu´, P., & Santos, A. P. (2010). The performance of socially responsible mutual funds: the role of fees and management companies. *Journal of Business Ethics,* 94:243-263.

Jensen, M. C., & Meckling, W. H.(1976). Theory of the firm: managerial behavior, agency costs and capital structure. *Journal of Financial Economics*, *3 (4)*, 305-360.

Jensen, M. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, *76*, 323-329.

Jensen, M. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance, 48*, 831-880.

Jones, A., & Willis, M. (2003). The challenge of XBRL: business reporting for the investor. *Balance Sheet*, *11(3)*, 29-37.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1997). Legal determinants of external finance. *Journal of Finance,* LII(3):1131-1150.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and finance. *Journal of Political Economy, 106(6)*:1113-1155.

Levine, R. (1999). Law, finance and economic growth. *Journal of Financial Intermediation, 8(1-2)*:8-35.

Li, Z., He, X., & Kong, X. (2011). Can fund dividend attract investors? An empirical research on open fund redemption puzzle in China. *China Accounting Review, 4*, 402-419.

Liu, C. (2009). Analysis of fund investment style, fund performance and the characteristics of fund manager. Unpublished doctoral dissertation, Dongbei University of Finance and Economics.

Lu, R., Chen, B., Xu, L., & Xie, X. (2007). Fund performance and investors' choice - analysis on the redemption puzzle of open-end fund market in China. *Economics Research, 6*, 39-50.

Menkhoff, L. (2002). Institutional investors: the external costs of a successful innovation. *Journal of Economic Issues, 36(4)*: 907-933.

Nanda, V., Wang, Z. J., & Zheng, L. (2004). Family values and the star phenomenon: strategies of mutual fund families. *Review of Financial Studies, 17*, 667-698.

Pistor, K., & Xu, C. (2005). Governing stock markets in transition economies: lessons from China. *American Law and Economics Review, 7 (1)*, 184-210.

Pistor, K., & Wellons, P. (1999). The role of law and legal institutions in Asian economic development: 1960-1995. Hong Kong: Oxford University Press.

Qian, M. (2011). Is “voting with your feet” an effective mutual fund governance mechanism? *Journal of Corporate Finance, 17*, 45-61.

Qian, M. (2006). Whom can you trust? A study on mutual fund governance. National University of Singapore Working Paper. Available at SSRN: http://ssrn.com/abstract=685543, October.

Ross, S. (1973). The economic theory of agency: the principal's problem. *American Economic Review, 63*, 134-139.

Sirri, E. R., & Tufano, P. (1998). Costly search and mutual fund flows. *Journal of Finance, LIII(5)*,1589-1622.

Smith, K. V. (1978). Is fund growth related to fund performance? *Journal of Portfolio Management, 4*, 49-54.

Spitz, A. E. (1970). Mutual fund performance and cash inflow. *Applied Economics, 2*, 141 -145.

Tufano, P., & Sevick, M. (1997). Board structure and fee-setting in the U.S. mutual

funds industry. *Journal of Financial Economics 46(December)*, 321-356.

Tuttle, B. M., & Kershaw, R.(1998). Information presentation and judgment strategy from a cognitive fit perspective. *Journal of Information Systems, 12(1)*, 1-17.

Xiao, J. & Shi, J. (2011). Historical performance and fund flows: does redemption anomaly exist in China's open-end fund market? *Economics Research,1*,112-125.

Yoon, H., Zo, H., & Ciganek, A. P. (2011). Does XBRL adoption reduce information asymmetry? *Journal of Business Research, 64*, 157-163.

Zabihollah, R., Elam, R., & Sharbatoghlie, A. (2001). Continuous auditing: the audit of the future. *Managerial Auditing Journal, 16(3)*, 150-158.

Zhu, K., Kraemer, K. L., & Xu, S. (2006). The process of innovation assimilation by firms in different countries: A technology diffusion perspective on e-business. *Management Science*, *52 (10)*, 1557-1576.

Table 1 The Proportion of Mutual Funds Assets and Shares in Total Securities Funds

Year	Funds Number	Net Assets of Mutual Funds (in one hundred millions RMB)	Proportion in Total Securities Funds	Mutual Funds Shares (in one hundred millions pieces)	Proportion in Total Securities Funds	Negotiable Market Values of Mutual Funds in Shanghai and Shenzhen A Share (in one hundred millions RMB)	Proportion in Total Securities Funds
2011	964	20693.45	94.41%	25147.8	94.86%	164237.83	12.60%
2010	739	23825.91	94.57%	23030.25	95.06%	193110.42	12.34%
2009	590	25522	95.37%	23589.92	96.15%	148431.71	17.19%
2008	441	18672.79	96.31%	24912.15	96.78%	44419.11	42.04%
2007	328	30361.21	92.69%	21534.56	96.44%	90526.52	33.54%
2006	268	6941.1	81.40%	5408.35	86.95%	23731.26	29.25%

Source: *2011 Industry Statistics Report for Chinese Securities Investment Funds*, Galaxy Securities Funds Research Center, January 6, 2012.

Table 2 Sample Selections

year	month	Whole Samples	Establishment after 2010	Missing Data	Final Samples
2007	6	218	0	55	163
	12	245	0	34	211
2008	6	251	0	14	237
	12	295	0	59	236
2009	6	327	0	92	235
	12	376	0	139	237
2010	6	436	36	166	234
	12	490	90	166	234
2011	6	567	167	167	233
	12	654	254	167	233
2012	6	743	341	169	233
	12	857	455	168	234
2013	6	928	526	169	233
	12	1,027	625	172	230
2014	6	1,143	741	176	226
Total		8,557	3,235	1,913	3,409

Table 3 Variable Definitions

Variables	Predicted Sign	Definition
NETFLOWIN		Net capital inflows of funds
XBRL	-	Whether to adopt XBRL for information disclosure? Yes=1, No=0
FUNDAGE	+	The proportions institutional investment accounts for in total share
DIVFREQ	+	Dividend frequency of funds of previous period
DIVSUM	+	Dividend quantity of funds of previous period
RETURNSTD	-	Revenue volatility of funds of previous period
FUNDCAR	-	The quantity of Partial stock funds via previous period adjustment
INSTHOLD	-	Management fees and custodian fees charged for funds
NEWFEE	+	Family size of funds in one funds management company of previous period
PREFTASSET	+	Natural logarithm of net asset of funds
NETASSET	+	Tenure of the fund manager
TENURE	+	Is the fund manager female? Yes=1, No=0
FEMALE	+	Educational background of the fund manager，0=junior college, 1=bachelor, 2=master, 3=doctor
EDU	+	Work experience of the fund manager by the number of the words provided in the fund manager’s resume

Table 4 Descriptive Statistics

Variables	Mean	Median	Std Dev	Max	Min	N
NETFLOWIN1	0.029	-0.025	0.372	3.044	-0.316	3409
NETFLOWIN2	0.019	-0.022	0.372	2.796	-0.610	3409
NETFLOWIN3	0.157	-0.054	0.997	7.525	-0.435	3409
XBRL	0.476	0.000	0.499	1.000	0.000	3409
FUNDAGE	1.724	1.792	0.465	2.485	0.693	3409
DIVFREQ	0.081	0.000	0.272	1.000	0.000	3409
DIVSUM	0.016	0.000	0.074	0.550	0.000	3409
RETURNSTD	1.370	1.290	0.514	3.000	0.230	3409
FUNDCAR	0.011	-0.001	0.129	0.394	-0.236	3409
INSTHOLD	0.127	0.063	0.160	0.745	0.002	3409
NEWFEE	0.007	0.006	0.006	0.031	0.001	3409
PREFTASSET	23.932	24.102	1.112	25.915	20.662	3409
NETASSET	22.088	22.200	1.042	23.999	18.763	3409
TENURE	6.457	6.604	0.945	7.987	3.178	3409
FEMALE	0.107	0.000	0.310	1.000	0.000	3409
EDU	2.048	2.000	0.436	3.000	0.000	3409
EXPERIENCE	5.826	5.817	0.352	6.603	5.043	3409

Table 5 Correlation Table (Spearman and Pearson)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
NETFLOWIN1	1	0.606***	0.341***	0.115***	0.193***	0.201***	-0.044**	-0.114***	0.193***	-0.142***	-0.017	0.043**	0.085***	-0.025	-0.016
		<.0001	<.0001	<.0001	<.0001	<.0001	0.011	<.0001	<.0001	<.0001	0.32	0.011	<.0001	0.15	0.348
NETFLOWIN2	0.936***	1	-0.026	0.056***	0.130***	0.137***	0.153***	-0.759***	0.060***	0.087***	0.084***	0.016	-0.002	-0.019	-0.005
	<.0001		0.122	0.001	<.0001	<.0001	<.0001	<.0001	0.001	<.0001	<.0001	0.342	0.913	0.278***	0.772***
NETFLOWIN3	0.617***	0.515***	1	-0.079***	0.062***	0.065***	0.005	0.346***	0.144***	-0.266***	-0.111***	0.121***	0.054***	-0.005	-0.005
	<.0001	<.0001		<.0001	0	0	0.766	<.0001	<.0001	<.0001	<.0001	<.0001	0.002	0.764	0.758
XBRL	-0.092***	-0.042**	-0.182***	1	-0.166***	-0.167***	-0.678***	-0.064***	-0.045***	-0.210***	-0.085***	-0.176***	0.268***	0.053***	-0.002
	<.0001	0.014	<.0001		<.0001	<.0001	<.0001	0	0.008	<.0001	<.0001	<.0001	<.0001	0.002	0.908
DIVFREQ	0.304***	0.267***	0.148***	-0.166***	1	0.999***	0.099***	0.072***	0.133***	-0.032*	0.022	0.017	-0.026	-0.044**	-0.037**
	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	0.062	0.202	0.325	0.123	0.011	0.031
DIVSUM	0.472***	0.428***	0.232***	-0.131***	0.714***	1	0.102***	0.072***	0.134***	-0.033*	0.019	0.016	-0.029*	-0.043**	-0.037**
	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	0.051	0.27	0.362	0.096	0.012	0.029
RETURNSTD	0.093***	0.143***	0.129***	-0.604***	0.091***	0.098***	1	-0.157***	0.037**	0.250***	0.065***	0.193***	-0.195	-0.062	0.025
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	0.029	<.0001	0	<.0001	<.0001	0	0.152
FUNDCAR	0.156***	-0.192	0.279***	-0.134***	0.101***	0.114***	-0.138***	1	0.056***	-0.275***	-0.175***	0.008	0.029*	0.002	-0.013
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		0.001	<.0001	<.0001	0.623	0.087	0.903	0.464
INSTHOLD	0.091***	0.062***	0.011	-0.004	0.118***	0.109***	0.013	0.080***	1	-0.053***	-0.073***	-0.183***	0.088***	-0.058***	0.056
	<.0001	0	0.506	0.819	<.0001	<.0001	0.462	<.0001		0.002	<.0001	<.0001	<.0001	0.001	0.001
NEWFEE	-0.113***	-0.019	-0.151***	-0.248***	-0.009	-0.016	0.251***	-0.274***	-0.057***	1	-0.071***	-0.180***	-0.197***	0.018	-0.025
	<.0001	0.265	<.0001	<.0001	0.608	0.358	<.0001	<.0001	0.001		<.0001	<.0001	<.0001	0.294	0.145
PREFTASSET	-0.140***	-0.067***	-0.186***	-0.061***	0.014	-0.042**	0.050***	-0.203***	-0.070***	-0.106***	1	0.549***	0.129***	-0.074***	0.059***
	<.0001	<.0001	<.0001	0	0.405	0.015	0.004	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	0.001
NETASSET	0.064***	0.059***	0.118***	-0.151***	0.007	-0.009	0.169***	0.017	-0.156***	-0.230***	0.536***	1	0.120***	-0.085***	0.035**
	0	0.001	<.0001	<.0001	0.666	0.616	<.0001	0.316	<.0001	<.0001	<.0001		<.0001	<.0001	0.04
TENURE	-0.029*	-0.021	-0.078***	0.229***	-0.022	-0.041**	-0.158***	-0.021	0.094***	-0.183***	0.137***	0.142***	1	-0.006	0.01
	0.086	0.231	<.0001	<.0001	0.205	0.016	<.0001	0.217	<.0001	<.0001	<.0001	<.0001		0.715	0.573

FEMALE	-0.033*	-0.029*	-0.040**	0.053***	-0.044**	-0.029*	-0.059	-0.01	-0.038**	0.011	-0.075***	-0.088***	-0.002	1	-0.108***
	0.057	0.091	0.02	0.002	0.011	0.091	0.001	0.56	0.028	0.52	<.0001	<.0001	0.911		<.0001
EDU	0.015	0.02	0.018	-0.005	-0.035**	-0.024	0.028*	-0.01	0.055***	-0.015	0.060***	0.035**	0.011	-0.105***	1
	0.377	0.248	0.283	0.748	0.043	0.169	0.099	0.551	0.001	0.377	0	0.043	0.533	<.0001	
EXPERIENCE	-0.035**	-0.022	-0.049***	0.132***	-0.019	-0.034**	-0.092***	-0.037**	0.100***	-0.117***	0.078***	0.056***	0.118***	-0.084***	0.031*
	0.040	0.190	0.004	<.0001	0.27	0.05	<.0001	0.033	<.0001	<.0001	<.0001	0.001	<.0001	<.0001	0.07

[†] Note: The Pearson (Spearman rank) correlations of the analyst-year standardized variables are above (below) the diagonal. The two-tailed p-values are in parentheses below the correlations.
All the variables are defined in the Table 3. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively.

Table 6 Descriptive Statistics before and after the XBRL Mandatory Adoption

Variable	Non-XBRL(n=1,787)		XBRL(n=1,622)		Test of Difference	
	Mean	Median	Mean	Median	T Test	Wilcoxon Z
	a	b	c	d	a-c	b-d
NETFLOWIN1	0.062	−0.032	−0.006	−0.021	0.068***	−0.011***
NETFLOWIN2	0.034	−0.029	0.002	−0.020	0.031**	−0.009***
NETFLOWIN3	0.330	−0.039	−0.033	−0.062	0.363***	0.022***
DIVFREQ	0.124	0.000	0.033	0.000	0.090***	0.000***
DIVSUM	0.025	0.000	0.005	0.000	0.019***	0.000***
RETURNSTD	1.666	1.600	1.044	1.030	0.622***	0.570***
FUNDCAR	0.027	0.005	−0.008	−0.003	0.035***	0.008***
INSTHOLD	0.128	0.066	0.127	0.059	0.001	0.007***
FEE	0.009	0.007	0.006	0.005	0.003***	0.002***
PREFTASSET	23.997	24.189	23.860	23.981	0.137***	0.208***
NETASSET	22.238	22.394	21.923	22.029	0.316***	0.365***
TENURE	6.251	6.404	6.684	6.887	−0.433***	−0.483***
FEMALE	0.092	0.000	0.125	0.000	−0.033***	0.000***
EDU	2.050	2.000	2.045	2.000	0.005	0.000
EXPERIENCE	5.781	5.771	5.875	5.894	−0.093***	−0.123***

Note: This table reports means and medians for the fund-semiyear(year) relative descriptive statistics. *XBRL* is an indicator variable that equals 1 if XBRL is adopted from 2009 and 0 if XBRL is not adopted. The other variables are defined in the Appendix. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively.

Table 7 Regression Results

$$NETFLOWIN=\beta_0+\beta_1\text{XBRL}+\beta_2\text{XBRL}\times\text{FEE}+\beta_3\text{INSTPERCENT}+\beta_4\text{DIVFREQ}+\beta_5\text{DIVSUM}+\beta_6\text{RETSTD}+\beta_7\text{RETURN}+\beta_8\text{FEE}+\beta_9\text{PREFTASSET}+\beta_{10}\text{NETASSET}+\beta_{11}\text{TENURE}+\beta_{12}\text{FEMALE}+\beta_{13}\text{EDU}+\beta_{14}\text{EXPERIENCE}+\sum\text{YEAR}+\xi \quad (1)$$

	model 1	model 2	model 3	model 4	model 5	model 6
INTERCEPT	0.463**	0.439**	0.447**	0.420**	1.890***	1.761***
	(0.020)	(0.028)	(0.024)	(0.035)	(0.000)	(0.001)
XBRL	-0.057***	-0.087***	-0.055***	-0.087***	-0.440***	-0.596***
	(0.001)	(0.000)	(0.001)	(<.0001)	(<.0001)	(<.0001)
XBRL×FEE		4.461***		4.830***		23.546***
		(0.004)		(0.002)		(<.0001)
DIVFREQ	-0.087*	-0.086*	-0.081*	-0.081*	-0.150	-0.147
	(0.068)	(0.070)	(0.090)	(0.093)	(0.161)	(0.171)
DIVSUM	2.394***	2.391***	2.359***	2.357***	2.384***	2.371***
	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(0.001)	(0.001)
RETURNSTD	0.019	0.017	0.024	0.022	0.020	0.011
	(0.310)	(0.354)	(0.188)	(0.222)	(0.706)	(0.834)
FUNDCAR	0.333***	0.325***	-0.661***	-0.670***	2.425***	2.382***
	(0.003)	(0.003)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
INSTHOLD	0.088*	0.090*	0.084*	0.086*	-0.168*	-0.158
	(0.066)	(0.060)	(0.078)	(0.071)	(0.088)	(0.108)
FEE	-5.987***	-6.929***	-6.053***	-7.072***	-21.485***	-26.454***
	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
PREFTASSET	-0.062***	-0.062***	-0.062***	-0.061***	-0.224***	-0.220***
	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
NETASSET	0.053***	0.053***	0.052***	0.053***	0.198***	0.201***
	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
TENURE	-0.003	-0.002	-0.002	-0.002	-0.037**	-0.035**
	(0.686)	(0.717)	(0.739)	(0.774)	(0.029)	(0.036)
FEMALE	-0.018	-0.018	-0.017	-0.017	-0.078**	-0.077**
	(0.111)	(0.115)	(0.124)	(0.129)	(0.024)	(0.026)
EDU	0.022	0.022	0.023	0.023	0.066*	0.068*
	(0.132)	(0.125)	(0.111)	(0.104)	(0.090)	(0.080)
EXPERIENCE	-0.019	-0.018	-0.019	-0.018	-0.035	-0.030
	(0.213)	(0.233)	(0.206)	(0.228)	(0.398)	(0.458)
YEAR	controlled	controlled	controlled	controlled	controlled	controlled
F Value	12.90***	12.33***	79.94***	75.76***	18.78***	17.72***
R-Square	0.2917	0.2924	0.3002	0.3010	0.2672	0.2700
Observations	3409	3409	3409	3409	3409	3409

† Note: This table presents results from estimating the above Equation (1) to evaluate the inflow after XBRL adoption. All the other variables are defined in the Appendix. Coefficients are estimated from the OLS regression and p-values in parentheses below the coefficient estimates are based on standard errors adjusted for and intra-mutual fund error correlation. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively.

Table 8 Additional Tests

$$NETFLOWIN=\beta_0+\beta_1 \text{XBRL}+\beta_2 \text{XBRL}\times \text{FEE}+\beta_3 \text{INSTPERCENT}$$
$$+\beta_4 \text{DIVFREQ}+\beta_5 \text{DIVSUM}+\beta_6 \text{RETSTD}$$
$$+\beta_7 \text{RETURN}+\beta_8 \text{FEE}+\beta_9 \text{PREFTASSET}+\beta_{10} \text{NETASSET} \quad (1)$$
$$+\beta_{11} \text{TENURE}+\beta_{12} \text{FEMALE}+\beta_{13} \text{EDU}+\beta_{14} \text{EXPERIENCE}+\sum \text{YEAR}+\xi$$

	model 1	model 2	model 3	model 4	model 5	model 6
INTERCEPT	0.581***	0.583***	0.558***	0.560***	1.899***	1.919***
	(0.006)	(0.006)	(0.008)	(0.008)	(0.001)	(0.001)
XBRL	-0.059***	-0.063***	-0.057***	-0.060***	-0.440***	-0.486***
	(0.001)	(0.000)	(0.001)	(0.001)	(<.0001)	(<.0001)
XBRL×XBRLTEST		0.015		0.016		0.220***
		(0.543)		(0.526)		(<.0001)
XBRLTEST	0.030**	0.023	0.028*	0.021	0.002	-0.104**
	(0.044)	(0.346)	(0.053)	(0.378)	(0.937)	(0.027)
DIVFREQ	-0.091*	-0.091*	-0.085*	-0.085*	-0.151	-0.150
	(0.057)	(0.057)	(0.077)	(0.078)	(0.161)	(0.163)
DIVSUM	2.405***	2.404***	2.370***	2.369***	2.385***	2.373***
	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(0.001)	(0.001)
RETURNSTD	0.018	0.018	0.024	0.024	0.020	0.020
	(0.326)	(0.326)	(0.198)	(0.198)	(0.706)	(0.704)
FUNDCAR	0.321***	0.321***	-0.673***	-0.673***	2.424***	2.424***
	(0.004)	(0.004)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
INSTHOLD	0.083*	0.084*	0.079*	0.080*	-0.168*	-0.160
	(0.080)	(0.077)	(0.094)	(0.090)	(0.088)	(0.104)
FEE	-5.996***	-6.015***	-6.061***	-6.081***	-21.486***	-21.765***
	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
PREFTASSET	-0.067***	-0.067***	-0.066***	-0.066***	-0.224***	-0.224***
	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
NETASSET	0.052***	0.052***	0.051***	0.051***	0.198***	0.198***
	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)	(<.0001)
TENURE	-0.003	-0.003	-0.002	-0.002	-0.037**	-0.037**
	(0.670)	(0.669)	(0.724)	(0.722)	(0.029)	(0.027)
FEMALE	-0.019*	-0.019*	-0.019	-0.019	-0.078**	-0.075**
	(0.090)	(0.093)	(0.102)	(0.106)	(0.025)	(0.030)
EDU	0.021	0.021	0.022	0.022	0.066*	0.063
	(0.153)	(0.156)	(0.129)	(0.132)	(0.092)	(0.104)
EXPERIENCE	-0.017	-0.017	-0.017	-0.017	-0.034	-0.033
	(0.266)	(0.269)	(0.257)	(0.259)	(0.398)	(0.419)
YEAR	controlled	controlled	controlled	controlled	controlled	controlled
F Value	12.20***	11.58***	75.13***	71.19***	17.77***	16.87***
R-Square	0.2925	0.2926	0.3009	0.3010	0.2672	0.2692
N	3409	3409	3409	3409	3409	3409

† Note: This table presents results from estimating the above Equation (1) to evaluate the inflow after XBRL adoption. All the other variables are defined in the Appendix. Coefficients are estimated from the OLS regression and

p-values in parentheses below the coefficient estimates are based on standard errors adjusted for and intra-mutual fund error correlation. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively.