

**Why Investors Do Not Buy Cheaper Securities:
Evidence from a Natural Experiment***

KALOK CHAN

Department of Finance
Hong Kong University of Science and Technology
Clear Water Bay, Hong Kong
Tel.: +85-2-2358-7680, Fax: +85-2-2358-1749
kachan@ust.hk

BAOLIAN WANG

Department of Finance
Hong Kong University of Science and Technology
Clear Water Bay, Hong Kong
Tel.: +85-2-6850-0370, Fax: +85-2-2358-1749
wangbaolian@ust.hk

ZHISHU YANG

School of Economics and Management, Tsinghua University
Beijing, 100084, China
Tel.: +86-10-62771769, Fax: +86-10-62785562
yangzhsh@sem.tsinghua.edu.cn

November 2012

*We thank Nengjiu Ju, Hung Wan Kot, Mark Seasholes, Chu Zhang and the participants at the 2009 Financial Management Association (FMA) conference at Xiamen, the 2009 China International Conference in Finance (CICF) at Guangzhou, and the 2009 Chinese Finance Association (TCFA) conference at New York for their helpful discussions. An earlier version of the paper is circulated under the title “Why Investors Do Not Buy Cheaper Securities? An Analysis of Trading by Individual Investors in Chinese Stock Market.” This research is supported by a grant from the NSFC (Project Number 70671060). All errors are our own.

**Why Investors Do Not Buy Cheaper Securities:
Evidence from a Natural Experiment**

ABSTRACT

We examine trading behavior of Chinese domestic investors after they are given access to the B-share market from 2001. We observe that even though A-shares trade at a premium to B-shares, domestic investors are reluctant to switch. The portfolio inertia can be explained by market-specific experience. Investors are less likely to buy B-shares if they have more experience in the A-share market, and vice-versa. The market-specific experience constrains the extent that investors respond to A/B share premium and liquidity, and has an adverse effect on their trading performance. Our study suggests that overweighting of personal experience can cause portfolio inertia.

Keywords: A/B share prices, portfolio inertia, trading experience, trading performance

JEL classification: G11, D03

1. Introduction

There has been growing interest in the effects of experience on decision making in the field of economics and finance. Previous literature views experience as an important source of information as well as an important determinant of agents' subjective expectation formation. With more prior trading experience, investors can learn to make better decisions and improve the performance (Arrow, 1962; Grossman, Kihlstrom, and Mirman, 1977; Nicolosi, Peng, and Zhu, 2009; Seru, Shumway, and Stoffman, 2009; Feng and Seasholes, 2005a; and Dhar and Zhu, 2006). On the other hand, recent studies reveal that investors put too much weight on their own personal experience than what rational agents should. They show that investors' prior experience affects their future investment decisions in the context of IPOs (Kaustia and Knupfer, 2008; Chiang, Hirshleifer, Qian, and Sherman, 2011), retirement savings (Choi, Laibson, Madrian, and Metrick, 2009), mutual funds management (Greenwood and Nagel, 2009).

A reason for the overweighting of personal experience is that investors have limited attention. If they put disproportionately more attention on their own personal experience, less will be allocated to other sources of information. In investment decisions, overweighting of personal experience may lead investors to allocate too much attention on the assets that they traded before, and too little to the other assets. Trading experience may also "define" the reference point for investors and make the past choice sticky due to loss-aversion (Kahneman and Tversky, 1979; Thaler, 1980) or the status quo bias (Samuelson and Zechhauster, 1988).

An implication of overweighting of personal experience is that investors will exhibit portfolio inertia, namely, they will tend to buy the assets they have more trading experience on, even when they should switch to other assets. In principle, observed portfolio inertia may not reflect irrationality if there are learning costs. In a frictionless world, we can ignore the learning costs, either the learning costs do not exist or are negligible. In practice, learning costs do exist and investors do not necessarily choose the investment that is considered superior due to the cost of learning.

The opening of the B-share market in mainland China in 2001 gives us a natural experiment to investigate the effect of experience on trading A versus B shares. In China, A- and B shares are issued by the same firms and share the same cash flow rights and control rights. The trading arrangement for them is also very similar. However, there has been greater demand for A-shares from domestic investors than from foreign investors, which has caused the A-shares to trade at a premium relative to B shares. Before 2001, domestic investors could only trade in the A-share market, and foreign investors could only trade in the B-share market. In February 2001, the Chinese government allowed domestic residents to invest in B shares, provided that they have the foreign currencies needed (either United States dollars for B shares traded on the Shanghai Stock Exchange, or Hong Kong dollars for B shares traded on Shenzhen Stock Exchange). Given that A- and B shares are very similar, the learning cost in switching from A-shares to B-shares should be minimal. Therefore, we can examine under the almost non-existence of learning cost, whether personal experience leads to portfolio inertia and if so, how it affects their trading performance.

We examine data from 2001 onward, when B-shares became available to domestic investors, to determine whether investors seek to buy the cheaper B-shares over the more expensive A-shares. This information sheds light on whether individual investors are aggressive or passive in adjusting their stock holdings in response to shifts in the investment opportunity. Given that the A- and B-shares enjoy the same cash flow rights, the A-share price premium (or the B-share price discount) implies that the expected return on B-shares is higher than that on A-shares. Therefore, we could expect rational investors to eagerly buy B-shares instead of A-shares.

We, however, find that investors are reluctant to switch to the B-share market. Based on the brokerage account data from the 2001-2005 period, we find that among more than 20,000 investors who traded stocks before February 2001, only less than 4% purchased B-shares and B-shares continued to trade at a huge discount relative to A-shares. This is consistent with the

view that investors exhibit portfolio inertia and they are not responsive enough to the change of the investment opportunity.

By examining companies that issue both A- and B-shares, we further examine the purchase decisions of investors who have participated in both the A-share market and the B-share market. We investigate what determines their propensity to buy additional B-shares instead of A-shares. Portfolio inertia would predict that investors are more likely to buy a particular type of share if they have more experience in the respective market. Basically, they are more likely to buy A-shares if they have more prior experience in the A-share market, and more likely to buy B-shares if they have more prior experience in the B-share market. We use the total number of trades in each market to measure their market-specific experiences.

Consistent with portfolio inertia behavior, we find strong evidence that investors' market-specific experiences affect their future purchase decision, with more A (B) share market experience leading to more future purchases in A (B) shares. Furthermore, investors respond to variables related to the expected return and trading costs, such as A/B share premium (the price gap between A- and B-shares) and liquidity. An increase in the A/B premium increases the propensity of investors to purchase B-shares over A-shares. In addition, an improvement in A-share (B-share) liquidity increases the propensity to purchase A (B) shares. This finding is consistent with investor rationality, as investors will take advantage of price differentials between the two markets and they care about liquidity.

However, we find that market-specific experience affects investors' responses to A/B share premium liquidity. The more trading experience they have in the A-share (B-share) market, the less (more) likely it is that their purchase decisions are affected by the A/B-share premiums and liquidity. This pattern is consistent with the view that market-specific experience tends to constrain investor attention, and limit the extent to which investors will take advantage of price differentials or take liquidity into consideration.

Despite the tendency of market-specific trading experience to affect purchasing decisions for A- or B-shares, our additional analysis shows that trading experience does not render investors any informational advantage. Investors who purchase B-shares do not earn a higher average return than if they purchased A-shares. It is only when investors purchase B-shares during a period of high market-level A/B premiums that they can earn a higher return than if they purchase A-shares. Many investors, however, exhibit portfolio inertia due to less trading experience in the B-share market relative to the A-share market, and these investors forgo a higher return by not participating in the B-share market during the periods of high market-level A/B premiums. Consistent with the conjecture that portfolio inertia is driven by investor behavioral bias, we find that large investors are less affected by market-specific experience.

Overall, our paper contributes to the literature by showing how prior trading experience leads to portfolio inertia, which affects purchasing choices between different assets. We also find that portfolio inertia has significant welfare implications, as it affects the extent to which investors will take advantage of relatively lower-priced stocks. This paper is consistent with previous studies documenting the existence of portfolio inertia behavior of investors. Using individual retirement account data, Agnew, Balduzzi, and Sunden (2001) find that employees rarely adjust their retirement portfolio. Madrian and Shea (2001), Choi, Laibson, Madrian and Metrick (2002, 2004) and Carroll, Choi, Laibson, Madrian and Metrick (2009) find that the employees are more likely to choose the default choice chosen by the plan. Our findings suggest that market-specific experiences can play a similar role as the default choice in terms of investors' portfolio choice decisions.

The rest of the paper is organized as follows. Section 2 provides an overview of the Chinese equity market. Section 3 describes the data and preliminary results. Section 4 discusses the explanatory variables for purchase decisions and presents the empirical results. Section 5 presents the conclusion.

2. Overview of Chinese Equity Markets

China's two securities markets, the Shanghai Securities Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE), were established in November 1990 and July 1991, respectively. Until 2001, the Chinese stock market was characterized by a complete segmentation between domestic and foreign investors. Dozens of companies issued category A-shares to domestic investors, and category B-shares to foreign investors. These shares were traded separately, and investors were restricted to their own categories of shares. The two categories of shares are legally identical, enjoying the same voting rights and dividend streams. The main difference is that all transactions, dividend payments, trades, and quotes are denominated in different currencies — Renminbi (RMB) for A-shares, U.S. dollars for the Shanghai B-shares, and Hong Kong dollars for the Shenzhen B-shares¹. The two classes of shares have been partially merged by allowing domestic individual investors to trade both classes since February 19, 2001. Before June 1, 2001, they can only trade B-shares with the foreign currencies deposited into the domestic banking system before February 19, 2001, but after June 1, 2001, they can use foreign currencies deposited at any time.

Both the Shanghai and Shenzhen stock exchanges use an electronic open limit order system, and conduct continuous trading Mondays to Fridays (except public holidays) from 9:30 am to 11:30 am, and 1 pm to 3 pm. Investors can submit limit orders, but market orders are not permitted. Investors can observe the current best five limit orders on both the bid and ask sides when they submit their orders. Orders not filled on the day of submission are automatically cancelled when the markets close. Both the A- and B-shares are traded within

¹ Although B shares are denominated in foreign currencies, they should not pose much currency risk to the investors. During most of the sample period, the exchange rate between RMB and U.S. dollar was fixed. At the same time, since Hong Kong dollars are also pegged to US dollars, the exchange rate between HKD and RMB was also fixed. In untabulated results, we find that our results are robust if we only consider the period in which the exchange rate of RMB was fixed.

the same electronic system, thus the learning cost of switching from one market to the other is minimal.

3. Data and Summary Statistics

3.1. Data

This study draws on a database from several branches of a large brokerage house with branches in various cities of mainland China. This database is quite similar to that used by Odean (1999), Barber and Odean (2000, 2001), Grinblatt and Keloharju (2000), Goetzmann and Kumar (2008), and Feng and Seasholes (2005b). The database contains the following information for individual investors: National Identity Card (NIC), fund account number, stock account number, stock trading records, fund account balance (in both RMB and foreign currency), and stock balance position. We obtain these data from several branches for various time periods. We also obtain the stock price, return and volume data from the China Stock Market and Accounting Research database (CSMAR).

According to Chinese law, an individual can open only one stock account for each stock market (Shanghai A, Shanghai B, Shenzhen A and Shenzhen B) using his or her NIC number. However, it is well known that some large investors have collected NICs from the public and have opened many additional stock accounts. Therefore, some investors may have multiple stock accounts, allowing them to bypass regulations and to engage in price manipulation. However, regardless of how many stock accounts investors have, they usually have only one fund account at one brokerage company from which they transfer cash to their different stock accounts. The investors seldom open more than one fund account, because there is no regulation over the fund account, and it is not easy to transfer cash from one fund account to another.

According to Chinese law, an individual can open only one stock account for each stock market (Shanghai A, Shanghai B, Shenzhen A and Shenzhen B) using his or her NIC number.

Therefore, some investors may have multiple stock accounts in each market. However, regardless of how many stock accounts investors have, they usually have only one fund account, from which they transfer cash to their different stock accounts. The investors seldom open more than one fund account, because it is not easy to transfer cash from one fund account to another.

Once an investor opens a fund account, he or she conducts all of the stock transactions via the same branch of the brokerage company, including purchases or sales of shares and transfers of cash in and out of the account. As the individual investors are prohibited from investing outside mainland China, the database effectively gives us information on all of their stock investments. Although trading on the A- and B-share markets might be conducted via different stock accounts, the identification of the fund account allows us to determine whether it is the same investor who trades in both markets. By monitoring the fund and stock accounts of each investor, we are able to calculate their cash and stock balances for any day in the sample period, and examine their preference for trading A-shares versus B-shares.

We focus on the sample period from February 2001 (after which domestic individual investors were allowed to trade B-shares) until December 2005. In our database there are 81,832 stock accounts, but only 37,184 fund accounts. Among the 37,184 investors, 796 traded in both the A- and B-share markets, and 36,388 traded only in the A-share market. These investors conducted 4,216,294 trades for A-shares and 73,950 trades for B-shares. The total trading volumes were 106 billion RMB for A-shares, and 3.27 billion RMB for B-shares.

3.2. Preliminary statistics

We classify investors into two groups, namely multi-market investors, who trade in both A- and B-share markets, and pure A-share investors, who trade only in the A-share market. There are 36,388 pure A-share investors, and 796 multi-market investors, who account for 97.8% and 2.1% of all investors in our database, respectively.

Panel A of Table 1 presents summary statistics on the trading characteristics of both multi-market and pure A-share investors. For the investor characteristics variables, we compute the data for each investor and then calculate the mean and median across all of the investors within one group. For the trade-related variables and other variables, we first calculate the time-series average for each investor, and then take an average across different investors within each group.

In terms of gender, 52% of the pure A-investors are male, and 41% of the multi-market investors are male. The average age of investors at the beginning of 2001 was around 46 years old for both groups of investors. On average, multi-market investors own A-share stocks in 9.75 companies, and B-share stocks in 3.82 companies. The pure A-share investors own an average of 4.12 stocks. Multi-market investors also tend to trade in larger orders than the pure A-share investors. The average trade size for multi-market investors is 31.13K RMB in A-shares and 99.49K RMB in B-shares, versus an average trade size of 18.7K RMB for the pure A-share investors. We also compare the portfolio size (cash balance + value of stocks) and turnover ratio (annual dollar trading volume divided by average portfolio size). We find that multi-market investors have larger portfolios than pure A-share investors, but they do not trade more frequently.

The investors in our sample hold B-shares in a total of 114 different companies, and 84 of these companies are cross-listed in the A-share market. Panel B of Table 1 presents a descriptive analysis for the 84 cross-listed shares. *Premium* is defined as the natural logarithm of difference between the A- and B-share prices, both of which are measured in RMB. The correlation between the A- and B-shares is based on daily stock returns. For all of these variables, we first calculate the time series mean for each firm, and then compute the average across all firms.

The average log premium is 64.8% (63.4% for the median), which means that on average the A-share price is two times ($\exp(64.8\%) - 1 = 0.912$) as the B-share price. There is strong

variation in premiums across different firms, with the premium averages being 45.8% in the first quartile and 82.6% in the third quartile. The mean correlation between daily returns of the A- and B-shares of the cross-listed companies is 0.582 (0.594 for the median). Therefore, despite the two share types being entitled to the same underlying cash flows, they are not perfectly integrated. If the investors decide to invest in a particular company, they also need to decide which category of shares they should purchase.

In addition to the premium and correlation, we calculate the standard deviation of daily stock returns and the Amihud (2002) illiquidity measures of both A- and B-share returns. The Amihud illiquidity measure is calculated month by month, based on daily data. The cross-sectional means of standard deviation on daily returns are 2.725% for A-shares, and 2.904% for B-shares, which suggests that the B-shares are slightly more volatile. To mitigate the effect of skewness, we use the logarithm of Amihud illiquidity. The mean (logged) Amihud illiquidity in A-shares is -19.371 (the median is -19.321), and the mean (logged) Amihud illiquidity in B-shares is -17.279 (the median is -17.309). In comparison with A-share liquidity, B-share liquidity is significantly worse.

4. Empirical Results

This empirical analysis is conducted based on two subsets of data. In the first part of the analysis (Section 4.1), we include both pure A-share investors and multi-market investors, as the purpose is to determine what factors affect the likelihood of an investor entering the B-share market. In the second part of the analysis, we include only multi-market investors, as we want to investigate what influences their decisions to purchase A or B-shares.

4.1. Who entered the B-share market?

The summary analysis in Table 1 provides preliminary information on the difference between the characteristics of pure A-share investors and multi-market investors. This table is based on information from the period since the B-share market opened up. However, we also

conduct an analysis using information from before the B-share market opened to domestic investors, to determine on an ex ante basis what factors best predict whether an investor will enter the B-share market.

To find ex ante determinants of who entered the B-share market, we focus on a subset of investors who traded before 2001. As they had already traded A-shares before the B-share market opened up, we have their personal and trading information, and can examine which investor characteristics are most common to those who have entered the B-share market.

In Models (1) and (2) of Table 2, we examine what factors influence investors to enter the B-share market. The dependent variable is a dummy variable that equals 1 if the investor conducts any trades in the B-share market during our sample period, and 0 otherwise. We use logistic regression to conduct the analysis. In Model (1), we include only the logarithms of Portfolio Size as the explanatory variable in the regression. Portfolio Size is measured as the total of the investor's stock portfolio and cash balance. It is significantly positive at the 1% level, suggesting that larger investors are more likely to enter the B-share market. In Model (2), we add investor age and gender to the regression model. Age is measured as of January 1, 2001, and Gender is a dummy variable that equals 1 for a male and 0 for a female investor. We find that Age is significantly positive and Gender is significantly negative, which indicates that older investors and females have a higher probability of entering the B-share market. Age could certainly be an indication of an investor's wealth, but as we do not have data on total wealth, we are unable to differentiate between these two factors.

In addition to looking at whether an investor has entered the B-share market or not, we also examine how much of their portfolio is held in B-shares. Models (3) and (4) present the results. In these two models, the dependent variable is the percentage of B-shares (in terms of value) in the portfolio. We first calculate the percentage of B-shares in the portfolio of each multi-market investor at the end of each day that the investor makes any trade, and then take a

time-series average across all of the trading days.² To capture the effect that the dependent variable is non-negative and that a large proportion of the observations involve no B-shares, we use a Tobit model to conduct the regression. The results in Models (3) and (4) are generally comparable to those in Models (1) and (2). All four variables show the same sign and are statistically significant.

4.2. What affects the purchase choice between A- and B-shares?

The previous section compares both pure A-share investors and multi-market investors in the empirical analysis, as we seek to determine what factors influence the likelihood of investors entering the B-share market. For the rest of the paper, our analysis is confined to the multi-market investors, as we examine what affects their purchasing decisions between the cross-listed A- and B-shares. As these investors trade both A- and B-shares, we can investigate how their past experience in each market affects the future purchase decision between the two.

We use a logistic regression to examine the determinants of investors' choices between A- and B-shares, as follows:

$$Prob(\text{Buy } B_{i,t}) = \alpha + \beta X_{i,t} + \varepsilon_{i,t}, \quad (1)$$

where *Buy B* is a dummy variable that equals 1 if the investor buys B-shares, and 0 if the investor buys A-shares, and *X* is a vector of control variables to be discussed below. Our analysis is based on data gathered at daily intervals. In all of the models, we include monthly dummy variables, and all of the standard errors are corrected for clustering by investor.

In investigating how investors choose between A- and B-shares, we include trading experience in each respective market to ascertain whether the market-specific experience is

² These results are robust to different ways of calculating the percentage of B shares in an investor's portfolio. We tried two different ways of calculating this: (1) by calculating the percentage at the end of each month, and (2) by calculating a value-weighted version of portfolio share, weighting the percentage of B shares on each day (or month) in relation to the size of the investor's stock portfolio at that time. All of the results are available upon request.

important in shaping purchase decisions. The main variables of interest are the investor's trading experiences in each market (*Experience_A* and *Experience_B*). *Experience_A* is defined as the logarithm of (1 + the total number of trades made by an investor in the A-share market), and *Experience_B* is defined as the logarithm of (1 + the total number of trades made by an investor in the B-share market). For both variables, the total number of previous trades is measured as of the day before the purchase decision. As *Experience_A* and *Experience_B* will increase over time, they are non-stationary. However, we include monthly dummies in the regression analysis to correct for the non-stationarity problem.

Previous research has found that investors can learn from their past trading experience, either rationally or naively (Chiang, Hirshleifer, Qian and Sherman, 2011; Feng and Seasholes, 2005a; Dhar and Zhu, 2006). Clearly, investors can learn from their experience, but if their experience is specific to one market, then this experience might constrain the investor's attention and lead to portfolio inertia. For example, Malmendier and Nagel (2011a, 2011b) demonstrate that investors have limited attention, and are affected more by their own experience than by new information available from elsewhere. As a result, if investors pay more attention to market-specific experience than to other available information, the market-specific experience tends to confine their attention and limit their choice set. Therefore, they end up purchasing more in the market that they have more experience with. In the case of the A- and B-share markets, even though the fundamentals underlying the A- and B-shares of a particular company are the same, the investors' market-specific experiences may help them learn the behavioral characteristics of one market, and not the other.

We investigate a number of control variables that may affect investors' decisions to purchase A or B-shares. The first variable is the A/B share premium (*Premium*). Standard portfolio theory implies that investors prefer higher expected return and dislike portfolio volatility. As A- and B-shares of the same firm enjoy the same cash flow rights, their expected returns are inversely related to their stock price levels, with a higher price implying a lower expected return. Thus, the A/B share premium is a direct measure of the difference in

expected returns of A- and B-shares in the same firm. We calculate *Premium* as the log difference between A- and B-share prices one day before the purchase, with both A- and B-share prices measured in RMB. Holding other things equal, an increase in *Premium* should increase the propensity of investors to buy B-shares instead of A-shares.

The second set of variables is related to share liquidity. Following Amihud (2002), we calculate the illiquidity measures for the A- and B-shares (*Amihud_A* and *Amihud_B*), based on the daily data from 30 days prior to the trade. We expect that investors are more likely to buy B-shares when the B-share market is relatively more liquid (lower *Amihud_B*) and the A-share market is relatively less liquid (higher *Amihud_A*).

The third set of variables is related to the risk of the stocks. These variables include the standard deviation of returns (*STD_A* and *STD_B*) and return skewness (*Skew_A* and *Skew_B*) for both types of shares. The standard deviation of returns is a measure of the total volatility of a stock. For individual investors with a small number of stocks in their portfolios, the standard deviation can measure the risk of a firm that cannot diversify itself. Investors might avoid buying the more risky securities if the risk is not adequately compensated. Skewness of returns is an additional measure of risk that may concern investors (Barberis and Huang, 2008; Mitton and Vorkink, 2007). In general, investors prefer positively skewed stocks and dislike negatively skewed stocks. Holding other things equal, we expect that investors are more likely to buy B-shares when the B-share market is less risky (lower *STD_B* and higher *Skew_B*) or when the A-share market is more risky (higher *STD_A* and lower *Skew_A*).

The fourth set of variables is related to the history and performance of the portfolio held by the investors. From the perspective of diversification, a portfolio consisting of both A- and B-shares may be less risky than buying A or B-shares only, given that the A- and B-share markets are not perfectly correlated. If diversification is a consideration affecting investors' portfolio choices, then investors are more likely to buy B-shares if they already have relatively more A-shares in their portfolios. We compute *Weight_A* to measure the

diversification benefit, with *Weight_A* calculated as the percentage of total value in each investor's stock portfolio that comes from holding A-shares. Also, investors' purchasing decisions might depend on whether they have made money in a given market previously (Barber, Odean and Strahilevitz, 2011). Thus, we consider how the past performance of the A- (B-) share markets affects the investors' future purchase decisions. We measure *Portfolio_Return_A* and *Portfolio_Return_B* as the investor's portfolio return since their last trade. This variable serves to capture the importance of past performance on investors' decisions.

In addition to the above factors, we consider variables reflecting other investor characteristics, share characteristics and market conditions. Investor characteristics include *Age* and *Gender*, as previous studies show that age and gender are important determinants of investor trading behavior (Barber and Odean, 2001; Korniotis and Kumar, 2011). Market condition variables include past market performance for the two markets (*MktRet_A* and *MktRet_B*) and past market turnover (*Mkt_Turnover_A* and *Mkt_Turnover_B*), which capture the factors of market sentiment (Baker and Wurgler, 2006; Baker and Stein, 2004; Brown and Cliff, 2004). The variables of *MktRet_A* and *MktRet_B* indicate the value-weighted market returns in the A- and B-share markets. *Mkt_Turnover_A* and *Mkt_Turnover_B* convey the average daily turnovers in the A-share (B-share) markets. All of these variables are calculated based on daily data from the 30 calendar days prior to a stock purchase.³

Table 3 shows the results of analyzing the determinants of choosing A or B-shares. In Model (1), we consider only the two variables that capture market-specific experience. The coefficients of *Experience_A* and *Experience_B* are -1.002 and 1.113, respectively, and both are highly significant at 1%.

In Models (2) to (6), we separately consider how the weighting of A-shares in the portfolio, the past portfolio return, the premiums, investor characteristics and the stock characteristics all influence investor choices between A- and B-shares. In Model (7), we consider all of these factors in one model. The results show that the higher the weight of

³ For more description of these variables, please refer to Table A1 in the Appendix.

A-shares in an investor's portfolio (*Weight_A*), the less likely it is that they will continue to buy B-shares. This finding is contrary to the diversification motive. One possible explanation is that *Weight_A* is highly correlated with the investment experience of investors in the A-share market. As we will see later, once we control for the investor's past experience (e.g., in Model (7)), *Weight_A* is no longer significant.

Consistent with our conjecture, *Premium* is significantly positive, *Amihud_A* is significantly positive, and *Amihud_B* is significantly negative. This is consistent with investor rationality, as investors respond to price differentials between the two markets and their relative liquidity. The investors are more likely to buy B-shares over A-shares when the A-share premium is high, or when the liquidity in the A-share (B-share) market is relatively low and that of the B-share market is relatively high.

The other variables that are statistically significant include the two return standard deviation variables, *STD_A*, which is significantly negative, and *STD_B*, which is significantly positive. These results indicate that investors are more likely to buy A (B) shares according to which market is more volatile. This tendency may suggest that investors prefer lottery-type assets (Kumar, 2009). In volatile market situations, we find that past performance has little or no effect on investor choice. Both A- and B-share portfolio returns (*Portfolio_Return_A* and *Portfolio_Return_B*) are significantly positive, suggesting that better performance in the past increases investors' propensity to buy B-shares. However, in the robustness check, these results do not seem very reliable.

In addition to examining *Experience_A* and *Experience_B* separately, we investigate the effect of the A- and B-share market relative experience and their total experience as an influence on purchasing decisions. We measure the A/B- share market relative experience (denoted as *Experience A/B*) as $\log(1 + \text{number of trades in the A-share market}) - \log(1 + \text{number of trades in the B-share market})$. The investor's total experience (denoted as *Experience A+B*) is measured as $\log(1 + \text{total number of trades in the A- and B-share market})$. The effects of these factors are shown in Models (8). Consistent with the findings in

Models (1) and (7), *Experience A/B* is significantly negative, implying that investors are more likely to buy B-shares when they have more experience in the B-share market relative to the A-share market. Interestingly, *Experience A+B* is also significantly positive, suggesting that greater general trading experience (experience not specifically related to each market) increases the propensity to purchase the lower-priced B-shares⁴.

4.3. Investor heterogeneity, learning, and portfolio inertia

The evidence so far indicates that investors are more likely to buy A (B) shares if they have relatively more experience in the A- (B-) share market. It is not surprising that having B-share trading experience increases an investor's propensity to trade B-shares. Because of the A/B share premium, the cheaper B-shares are expected to yield higher returns than the more expensive A-shares. Indeed, during our sample period, the average realized returns of B-shares were higher, especially right after the B-share market opened, when the A-share premium was relatively high. However, we must ask why those with experience trading A-shares tend to increase their propensity to trade A-shares, even though A-shares are much more expensive than B-shares.

We propose three explanations for this tendency: investor heterogeneity, learning, and portfolio inertia. According to the investor heterogeneity explanation, we have different clienteles in the A- and B-share markets. This clientele effect might be due to some comparative advantages that some investors enjoy. For example, some domestic investors may have had better access to foreign currency, so were more able to trade in B-shares once they became accessible. By trading in the B-share market they may find a comparative advantage in trading B-shares as compared to A-shares. If that is the case, past B-share trading experience may capture their comparative advantage of trading in the B-share market.

⁴ This is consistent with Feng and Seasholes (2005a), Dhar and Zhu (2006), and Bailey, Kumar and Ng (2008). They find that general trading experience reduces behavioral bias and improve trading performance.

If so, it is not surprising that market-specific experience affects their future purchase decisions.

However, we can rule out the explanation of investor heterogeneity for two reasons. First, Model (1) of Table 4 also reports the regression results after controlling for the investor fixed effect. If the previous finding is due to investor heterogeneity, then the effect of market-specific experience should disappear after controlling for the investor fixed effects. However, as we see from Table 4, even after controlling for the investor fixed effects, the coefficients of *Experience_A* and *Experience_B* remain significant.

Second, even if some investors find more advantage trading in one market than in others, the advantage should be at the market level rather at the individual stock level. In other words, as A- and B-shares enjoy the same underlying fundamentals, it is unlikely that investors are heterogeneous in their ability to trade a particular type of the same company's shares. For this reason, we also calculate the company-specific experience for A- and B-shares (much as we constructed market-specific experience variables). For a particular company under investigation (which we call the focal company) we define the company-specific experience for A-shares as $\log(1 + \text{total number of trades in A-shares of the focal company})$, and company-specific experience for B-shares as $\log(1 + \text{total number of trades in B-shares of the focal company})$. Even if there is investor heterogeneity, we should not expect company-specific experience to be important in affecting additional purchases of B-shares in the focal company. In Model (2), after controlling for market-level share experience, company-level share experience is also significant in affecting future purchase decisions. Comparing the coefficients of the market-level and company-level experiences, the company-level experience variables are more important. Specifically, the estimated coefficients of the B-share market-level experience and the B-share company-level experience are 1.062 and 1.055, which are very close to each other. However, the estimated coefficients of the A-share market-level experience is -0.734, which is less than half of the

coefficient (-1.844) of the A-share company-level experience variable. The findings in Models (1) and (2) are thus both inconsistent with the investor heterogeneity hypothesis.

The second explanation for the non-diversification between markets is learning, as investors may find that their previous A-share trading experience helps them to learn and to focus on that market (Feng and Seasholes, 2005a; Dhar and Zhu, 2006). If this is the case, then market-specific experience will increase investors' performance in the market that they are more experienced in.

In testing this prediction, we use a calendar time value-weighted portfolio to conduct a performance comparison. To perform this test, we use a calendar portfolio method for mimicking the purchases by investors. For each purchase by the investor, we buy the same shares at the close of that day's trading. These shares are held for 1, 2, and 3 months. All of the portfolio returns are value-weighted, with the weights being the market value of the shares in the portfolio at the beginning of each day. We report the monthly returns that are compounded from the daily calendar portfolio returns.

The results are given in Table 5. The "Performance" column is the return on a portfolio mimicking the trades by the investors. The "Benchmark" column is the return on a portfolio constructed to be "opposite" to the trades by the investors. If investors are buying A (B) shares of one firm, then the benchmark portfolio does the opposite by buying the B (A) shares of the same firm. The "Difference" column indicates the difference between "Performance" and "Benchmark." At the beginning of each month, all investors are sorted into two groups based on the *Experience A/B* variable, which is defined as $\log(1 + \text{total number of trades in the A-share market}) - \log(1 + \text{total number of trades in the B-share market})$. We separate these two groups into *Less* and *More*, based on the *Experience A/B* variable.

Table 5 shows the results for three different holding periods. If market-specific experience renders an investor information advantage, we would expect the *Less Experience A/B* investors to perform better in B-shares, and the *More Experience A/B* investors to perform better in A-shares. The results in Table 5 do not support this hypothesis. Panel A

shows the performance from buying A-shares. For the 1-month holding period, the average return on buying A-shares for the *Less Experience A/B* investors is -0.245%, which is lower than the benchmark by 0.849%. The average return of buying A-shares for the *More Experience A/B* investors is 0.729%, which is also lower than the benchmark by 3.933%. Therefore, there is no evidence that investors with relatively more experience in the A-share market (*More Experience A/B*) have a better performance in buying A-shares.

Panel B shows the performance of buying B-shares. Again there is no evidence that investors with relatively more experience in the B-share market (*Less Experience A/B*) have a better performance in buying B-shares. For the 1-month holding period, the average return from buying B-shares for the *Less Experience A/B* investors is 2.502%, which is better than the benchmark by 1.785%. The average return from buying shares for the *More Experience A/B* investors is 3.081%, which is better than the benchmark by 2.959%. Overall, Table 5 suggests that market-specific experience does not render investors an information advantage.

In summary, the results in Tables 4 and 5 suggest that the effect of market-specific experience on the propensity of investors to purchase A- and B-shares is not driven by investor heterogeneity, nor is it related to rational learning that would render the investor any informational advantage. Instead, the results appear to be driven by portfolio inertia. Our finding that company-level share experience is also important in determining future purchase choices between the A- and B-shares (even after controlling for the market-level share experience) suggests that experience not only confines investors' attention to one market, but also confines their attention to one share type of a particular company. In fact, the finding that the effects of company-level experience are more important than those of market-level experience is also consistent with portfolio inertia.

4.4. Market-specific experience and the effect of premiums and liquidity

In Table 6, we examine how market-specific experience affects investors' responsiveness to A/B share premiums and liquidity. If market-specific trading experience confines investor

attention, we may expect that such experience will render investors less responsive to the A/B share premiums and liquidity. Although it is rational for investors who acquire more B-share market experience to buy the cheaper B-shares, it is irrational for investors with more A-share market experience to purchase the higher-priced A-shares.

To examine whether market-specific experience affects investors' responsiveness to A/B share premiums and liquidity, we add interaction terms between the market-specific experience variables and the variables measuring A/B share premiums and liquidity. The results are shown in Table 6. In Models (1), (3) and (5), we do not include the control variables, but in the other models we control for other determinants. The results show that A-share experience decreases investors' responsiveness to A/B share premiums and A/B share liquidity, but B-share experience increases responsiveness to these factors, although the results concerning B-share liquidity are not significant.

These results suggest that investors in both markets learn from participation in trading B-shares, but trading experience in the A-share market alone confines the investors' attention and makes them less responsive to the factors that should affect the purchase decisions of rational investors.

4.5. Performance in low and high A/B share premium periods

In this section, we examine whether this portfolio inertia behavior affects the investors' performance, with reference to the mean reversion of the market-level A/B share premium⁵, which is defined as the average A/B share premium of all pairs of cross-listed A/B stocks, calculated on equal-weighted basis⁶. Our results so far show that investors are more likely to participate in the market in which they have more trading experience, and they are less responsive to A/B share premiums if they have more experience in the A-share market. As the A/B share premium is mean-reverting (i.e., the premium will change from high to low over

⁵ Appendix A2 provides evidence on the mean reversion of market-level A/B share premium.

⁶ Our results are very similar if we calculate market-level A/B share premium on value-weighted basis.

time), this implies that investors with relatively more experience in the A-share market may perform more poorly than investors with relatively more experience in the B-share market, especially when the premium is high.⁷

Table 7 shows the results of examining the trading performance of investors sorted by their relative experience in the A/B share market (*Experience A/B*) in different market periods. The market periods concerned are the period of low market-level A/B share premiums, versus the period of high market-level A/B share premiums. The low premium period comprises the months in which the beginning market-level premium is below the sample median, and the high premium period comprises the other months. To perform this test, we use the same calendar portfolio method used in section 4.3.

The results for a 1-month holding period show that the investors with relatively more B-share experience (*Less Experience A/B*) earn -0.592% during the period of low market-level A/B share premium, and 5.674% during the period of high market-level A/B share premium. However, investors with relatively more experience in the A-share market (*More Experience A/B*), lose -1.222% during the low market-level A/B share premium period, and earn 1.884% during the high premium period. Thus, the investors with relatively more B-share experience perform significantly better (3.790% higher) during the high premium period, and slightly better during the low premium period (only 0.630% higher). The difference in differences is 3.160%, which is also statistically significant. These results are also robust for the 2-month holding period, but weaker for the 3-month holding period.

Overall, these results show that portfolio inertia is not welfare neutral, as investors with relatively more experience in the A-share market forgo large returns when the B-shares are undervalued significantly (i.e., when the market-level A/B share premium is high).

⁷ We consider market-level A/B share premiums instead of firm-level A/B share premiums as we would like to focus on the market-level experience, rather than company-level experience. The market-level experience will influence investors to decide between A and B shares, but not on which particular company to buy.

4.6. How much does investor sophistication matter?

As previous research has shown, behavioral biases are more pronounced among small investors (Malmendier and Shanthikumar, 2007). Therefore, we also examine whether portfolio inertia is more pronounced among small investors. We perform an analysis by partitioning investors into two groups, based on their portfolio size (the sum of stock portfolio size and cash balance). We do this partitioning month by month, based on the beginning month portfolio size. In each month, investors with an above median portfolio size are classified as large investors, and the others as small investors.

Table 7 also reports results on how investor sophistication affects their performance, with the data partitioned to show the trading performance for small and large investors. We illustrate the comparison for the 1-month period. For small investors, those with relatively more B-share experience perform significantly better (4.999% higher) during the high-premium period, but marginally worse during the low-premium period (0.467% lower). The difference in differences is 5.466%. Among large investors, those with relatively more B-share experience perform slightly better both during the high premium period (2.150% higher) and low premium period (0.851% higher). The difference in differences is only 1.299%. This result shows that even in terms of trading performance, large investors appear to be more sophisticated, and are less affected by their market-specific experience.

We also compare the effect of market-specific experience in affecting the responsiveness to A/B share premiums and liquidity by small and large investors. If investor sophistication mitigates portfolio inertia behavior, we expect that the small investors will be more strongly affected by their past market-specific experience. In that case, the difference in performance between relatively more B-share experienced investors and the relatively more A-share experienced investors should be larger among small investors.

Table 8 presents the results. Models (1), (3), (5), and (7) give the regression results for small investors and the other models show the results for large investors. The coefficients of

both *Experience_A* and *Experience_B* are significant for small investors and large investors, but the absolute magnitude is smaller for large investors (chi-square tests for the difference are significant at the 1% level for both *Experience_A* and *Experience_B*). We observe that the coefficients of the interaction term between *Experience_A* and *Premium* and of the interaction term between *Experience_B* and *Premium* all become smaller in magnitude moving from small investors to large investors. The magnitude decreases by around 50% for both interaction terms, although the differences are not statistically significant.

The remaining four models compare investor responsiveness to A/B share liquidity. We do not find a significant difference between small investors and large investors in their responsiveness to B-share liquidity, but the differences between these groups in their responsiveness to A-share liquidity is significant. From Models (5) and (6) we can see that market-specific experience is only important in affecting responsiveness for the small investors, and that the differences between small investors and large investors are significant, at 8% level for *Experience_A*, and 4% level for *Experience_B*.

5. Conclusions

In this paper, we use brokerage house data to investigate what determines investor choices between purchases of A- and B-shares. As China's A- and B-shares enjoy the same cash flow rights and voting rights, there is no difference in firm fundamentals. Therefore, we can directly examine how the differences in investor characteristics affect their purchasing decisions.

We find that after the B-share market opened to domestic investors, only a small fraction of investors entered the B-share market. Among the investors who trade in both markets, their purchase choices between the two share classes are affected by the A/B share premium and liquidity, which is consistent with investor rationality. However, we also find that their choices are strongly affected by their prior accumulated trading experience in each market. Specifically, the investors are more likely to buy the share class that they have the most

experience dealing with. This experience-based preference cannot be explained by investor heterogeneity, nor does trading experience render better trading performance by investors.

As the B-shares are traded at a discount, and are expected to give higher returns than the A-shares, investors may gradually learn from their trading experience, and capitalize on the A/B share premium to earn higher returns by buying B-shares. It is not surprising that more B-share market experience leads investors to increased trading in the B-share market. However, we must explain why experience in the A-share market tends to lower the investor's propensity to purchase B-shares. We rule out the explanations of investor heterogeneity and learning. The most likely explanation is that prior market-specific experience may confine investor attention, and lead to portfolio inertia. Consistent with this explanation, we find that investors with more A-share market experience are less responsive to the A/B share premium and to A/B share liquidity. Furthermore, we find that investors with relatively more experience in the A-share market forgo significant profits when the A/B share premium is high, as they do not participate in the B-share market as much as the other investors.

Previous findings show that economic agents pay far more attention to their personal experiences than to data available from elsewhere, and they emphasize their own past experience in learning. Our finding that past experience confines investor attention and leads to portfolio inertia suggests a different role of past experience in affecting the decision making of economic agents. Furthermore, we show that this role of experience is not welfare neutral, as it significantly affects investors' trading strategy and performance.

We argue that there are two possible reasons that investors exhibit portfolio inertia behavior. The first reason is based on the recent finding that investors overweight their personal experience relative to rational expectation in decision making (Malmendier and Nagel, 2011a, 2011b; Schoar and Zuo, 2012) and human beings have limited attention. A second reason is that past trading experience may "define" the reference point for investors

and make the past choice sticky due to loss aversion (Kahneman and Tversky, 1979; Thaler, 1980) or the status quo bias (Samuelson and Zeckhauser, 1988).

Researchers have documented that the retirement plan participants also exhibit portfolio inertia, as they are passive in deviating from the default choice set up by the plan and are rarely to do portfolio reshuffling. Our findings suggest that market-specific experiences play a similar role as the default choice in affecting investors' portfolio choice decisions.

References

- Agnew, J., O. Balduzzi, and A. Sunden, 2003, Portfolio Choice and Trading in a Large 401(k) Plan, *American Economic Review* 93 (1): 193-215.
- Amihud, Y., 2002, Illiquidity and Stock Returns: Cross-Section and Time-Series Effects, *Journal of Financial Markets* 5 (1): 31-56.
- Arrow, K., 1962, The Economic Implications of Learning by Doing, *Review of Economic Studies* 29 (3): 155-173.
- Bailey, W., A. Kumar, and D. Ng, 2008, Foreign Investments of U.S. Individual Investors: Causes and Consequences, *Management Science* 54 (3): 443-459.
- Baker, M., and J. Stein, 2004, Market Liquidity as a Sentiment Indicator, *Journal of Financial Markets* 7 (3): 271-299.
- Baker, M., and J. Wurgler, 2006, Investor Sentiment and the Cross-Section of Stock Returns, *Journal of Finance* 61 (4): 1645-1680.
- Barber, B., and T. Odean, 2000, Trading is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors, *Journal of Finance* 55 (2): 773-806.
- Barber, B., and T. Odean, 2001, Boys will be Boys: Gender Overconfidence, and Common Stock Investment, *Quarterly Journal of Economics* 116 (1): 261-292.
- Barber, B., T. Odean, and M. Strahilevitz, 2011, Once Burned, Twice Shy: How Naïve Learning, Counterfactuals, and Regret Affect the Repurchase of Stocks Previously Sold, *Journal of Marketing Research* 48 (SPL): 102-120.
- Barberis, N., and M. Huang, 2008, Stocks as Lotteries: The Implications of Probability Weighting for Security Prices, *American Economic Review* 98 (5): 2066-2100.
- Brown, G., and M. Cliff, 2004, Investor Sentiment and the Near-Term Stock Market, *Journal of Empirical Finance* 11 (1): 1-27.
- Carroll, G., J. Choi, D. Laibson, B. Madrian, and A. Metrick, 2009, Optimal Defaults and Active Decisions, *Quarterly Journal of Economics* 124 (4): 1639-1674.
- Chiang, Y., D. Hirshleifer, Y. Qian, and A. Sherman, 2011, Do Investors Learn from Experience? Evidence from Frequent IPO Investors, *Review of Financial Studies* 24 (5): 1560-1589.
- Choi, J., D. Laibson, B. Madrian, and A. Metrick, 2002, Defined Contribution Pensions: Plan Rules, Participant Decisions, and the Path of Least Resistance, in James M. Poterba, ed., *Tax Policy and the Economy* Vol. 16. Cambridge, MA: MIT Press, 67-113.
- Choi, J., D. Laibson, B. Madrian, and A. Metrick, 2004, For Better or For Worse: Default Effects and 401(k) Savings Behavior, In David Wise, ed., *Perspectives in the Economics of Aging*. Chicago: University of Chicago Press.
- Choi, J., D. Laibson, B. Madrian, and A. Metrick, 2009, Reinforcement Learning and Savings Behavior, *Journal of Finance* 64 (6), 2515-2534.
- Dhar, R., and N. Zhu, 2006, Up Close and Personal: Investor Sophistication and the Disposition Effect, *Management Science* 52 (5): 726-740.
- Feng, L., and M. Seasholes, 2005a, Do Investor Sophistication and Trading Experience Eliminate Behavioral Biases in Financial Markets? *Review of Financial Studies* 9 (3): 305-351.
- Feng, L., and M. Seasholes, 2005b, Correlated Trading and Location, *Journal of Finance* 59 (5): 2117-2144.
- Goetzmann, W., and A. Kumar, 2008, Equity Portfolio Diversification, *Review of Finance* 12 (3): 433-463.
- Greenwood, R., and S. Nagel, 2009, Inexperienced Investors and Bubbles, *Journal of Financial Economics* 93 (2): 239-258.
- Grinblatt, M., and M. Keloharju, 2000, The Investment Behavior and Performance of Various Investor Types: A Study of Finland's Unique Data Set, *Journal of Financial Economics* 55 (1): 43-67.
- Grossman, S., R. Kihlstrom, and L. Mirman, 1977, A Bayesian Approach to the Production of Information and Learning by Doing, *Review of Economic Studies* 44 (3): 533-547.

- Kahneman, D., and A. Tversky, 1979, Prospect Theory: An Analysis of Decision under Risk, *Econometrica* 47 (2): 263-292.
- Kaustia, M., and S. Knupfer, 2008, Do Investors Overweight Personal Experience? Evidence from IPO Subscriptions, *Journal of Finance* 63 (6): 2679-2702.
- Korniotis, G., and A. Kumar, 2011, Do Older Investors Make Better Investment Decisions? *Review of Economics and Statistics* 93 (1): 244-265.
- Kumar, A., 2009, Who Gambles in the Stock Market? *Journal of Finance* 64 (4): 1889-1933.
- Madrian, B., and D. Shea, 2001, The Power of Suggestion: Inertia in 401(k) Participation and Saving Behavior, *Quarterly Journal of Economics* 116 (4): 1149-1187.
- Malmendier, U., and S. Nagel, 2011a, Depression Babies: Do Macroeconomic Experiences Affect Risk Taking? *Quarterly Journal of Economics* 126 (1): 373-416.
- Malmendier, U., and S. Nagel, 2011b, Learning from Inflation Experiences, Working Paper, UC Berkeley and Stanford.
- Malmendier, U., and D. Shanthikumar, 2007, Are Small Investors Naïve about Incentives? *Journal of Financial Economics* 85 (2): 457-489.
- Mitton, T., and K. Vorkink, 2007, Equilibrium Underdiversification and the Preference for Skewness, *Review of Financial Studies* 20 (4): 1255-1288.
- Nicolosi, G., L. Peng, and N. Zhu, 2009, Do Individual Investors Learn from their Trading Experience? *Journal of Financial Markets* 12 (2): 317-336.
- Odean, T., 1999, Do Investors Trade Too Much? *American Economic Review* 89 (5): 1279-1298.
- Samuelson, W., and R. Zeckhauser, 1988, Status Quo Bias in Decision Making, *Journal of Risk and Uncertainty* 1: 7-59.
- Schoar, A., and L. Zuo, 2012, Shaped by Booms and Busts: How the Economy Impacts CEO Careers and Management Styles, NBER Working Paper No. 17590.
- Seru, A., T. Shumway, and N. Stoffman, 2009, Learning by Trading, *Review of Financial Studies* 23 (2): 705-739.
- Thaler, R., 1980, Toward a Positive Theory of Consumer Choice, *Journal of Economic Behavior and Organization* 1 (1): 39-60.

Table 1: Summary statistics for the investors and the stocks

Panel A. Description of the investors

This panel presents the summary statistics for the investors who trade only in the A-share market (single-market investors) and the investors who trade in both markets (multi-market investors). For the multi-market investors, we report their trading behavior in the A- and B-share markets separately. *Number of stock accounts* is the average number of stock accounts per investor. *Gender* is the gender of the investor, which equals 1 for a male and 0 for a female investor. *Age at 20010101* is the age of the investor at January 1, 2001. *Number of stocks in portfolio* is the average number of stocks in the investor's portfolio. *Number of trades (yearly)* is the average number of trades per investor per year. *Trading Size* is average size of trades by the investors, measured in terms of dollar values or numbers of shares. *Cash Balance* is the average remaining disposable domestic (foreign) currency in the investors' fund accounts. *Size of Stock Portfolio* is the average size of an investor's portfolio in A (B) shares, measured in RMB. *Cash+Stock* is the summation of *Cash Balance* and *Size of Stock Portfolio* per investor. *Portfolio Turnover* is the yearly total trading volume over average yearly stock portfolio size. *Number of stock accounts*, *Gender* and *Age* are first calculated for each investor, and then averaged across all investors. The other variables are calculated by averaging, using all observations for each investor, and then averaging across the investors. The period used is from February 19, 2001 to December 31, 2005.

	Multi-Market Investors				Single Market Investors	
	A-shares		B-shares		A-shares	
	Mean	Median	Mean	Median	Mean	Median
Number of investors	796				36388	
Gender	0.41				0.52	
Age at 20010101	45.7	43.0			46.0	44.2
Number of stocks in portfolio	9.75	4.87	3.81	2.5	4.12	2.68
Number of trades (yearly)	51.23	16.10	20.38	6.65	28.59	5.96
Trading Size (1,000 RMB)	31.13	18.67	99.49	19.74	18.71	8.91
Trading Size (in Shares)	5026	3077	12107	3364	2320	1000
Cash Balance (1,000 RMB)	257	22	91	20	114	12
Size of Stock Portfolio (1,000 RMB)	2913	174	5377	538	692	32
Cash+Stock (1,000 RMB)	3170	233	5468	557	806	51
Portfolio Turnover (yearly)	1.75	1.92	0.63	0.21	1.98	1.75

Panel B. Description of the stocks

Panel B presents the summary of information on the investors' stocks. *Premium* is defined as the log difference between A-share prices and B-share prices. All prices are measured in RMB. *Correlation* is the average correlation between the cross-listed A/B shares in our sample period. *Standard deviation: A* and *Standard deviation: B* are the standard deviations on returns of A/B shares. *Amihud illiquidity* is measured following Amihud (2002), and is calculated using daily data from each month. Because Amihud illiquidity is highly skewed, instead of reporting the raw data, we report the statistics of log Amihud illiquidity. The period used is from February 19, 2001 to December 31, 2005. Only the cross-listed A/B shares are analyzed.

	Mean	Median	STD	Q25	Q75
Premium	0.648	0.634	0.269	0.458	0.826
Correlation	0.582	0.594	0.107	0.553	0.644
Standard deviation: A	2.725	2.551	1.387	2.247	2.771
Standard deviation: B	2.904	2.561	1.796	2.382	2.866
Amihud illiquidity: A	-19.371	-19.321	1.162	-20.167	-18.581
Amihud illiquidity: B	-17.279	-17.309	1.989	-18.653	-16.128

Table 2: Test of who entered the B-share market

This table presents the results on regression analysis of investors who entered the B-share market. The dependent variable for Models (1) and (2) is a dummy variable that equals 1 if the investors entered the B-share market before the end of our sample period, and 0 otherwise. The dependent variable for Models (3) and (4) is the percentage of B-shares in each portfolio. We confine our sample to investors who entered the A-share market before February 19, 2001. The dependent variable equals 1 if the investor entered the B-share market during our sample period, and 0 otherwise. All of the independent variables are constructed using only data from before the B-share market opened. *Portfolio Size* is the size of stock portfolio per investor. *Age* is the age of each investor at January 1, 2001. *Gender* is the gender of the investor, which equals 1 for a male and 0 for a female. Models (1) and (2) are estimated using a logistic regression, and Models (3) and (4) are estimated using a Tobit model. The robust *t*-statistics are indicated by parentheses.

	Enter or not		Fraction of B-shares in portfolio	
	(1)	(2)	(3)	(4)
Log Portfolio Size	0.634*** (29.42)	0.723*** (29.96)	0.208*** (22.60)	0.226*** (22.92)
Age		0.013*** (3.27)		0.004*** (3.31)
Gender		-0.650*** (-6.27)		-0.179*** (-5.87)
Constant	-11.340*** (-42.50)	-12.063*** (-40.52)	-3.902*** (-26.02)	-3.972*** (-25.61)
Pseudo R ²	0.162	0.190	0.177	0.203
Obs.	31092	29878	30874	29665

Table 3: Determinants of the purchase decisions

Buy B is the dependent variable. This is a dummy variable that equals 1 if an investor buys the B-shares of any cross-listed firm, and 0 if an investor buys only A-shares. *Experience A* and *Experience B* equal to $\log(1 + \text{total number of trades in A-shares})$ and $\log(1 + \text{total number of trades in B-shares})$, respectively. *Weight A* is the weight of A-shares in the total value of an investor's stock portfolio. *Portfolio Ret A* (*Portfolio Ret B*) is the return on an investor's A- (B-) share portfolio since the last trade. *Premium* is the A-share premium over the B-share premium, which is calculated as the log difference between the A-share price and the B-share price. The prices of A- and B-shares are both measured in RMB. *Portfolio Size* is the log portfolio size, taking both cash and stock into account. *Age* and *Gender* are the age and gender of the investor. *Gender* equals 1 for a male and 0 for a female investor. *StkRet A* (*StkRet B*) is the cumulative return on an investor's A (B) shares from the past 30 calendar days. *STD A* (*STD B*) is the standard deviation of A- (B-) share returns over the past 30 calendar days. *Skew A* (*Skew B*) is the skewness of A- (B-) share returns over the past 30 calendar days. *MktRet A* (*MktRet B*) is the A- (B-) market return over the past 30 calendar days. *Mkt Turnover A* (*Mkt Turnover B*) is the average turnover for all of the A (B) shares. The month fixed effects are added but not reported. The period used is from February 19, 2001 to December 31, 2005. We use a logistic regression to estimate the parameters. All of the standard errors are clustered by investor.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Experience A	-1.002*** (-12.29)						-0.960*** (-9.67)	
Experience B	1.113*** (9.89)						1.128*** (12.18)	
Experience A/B								-1.047*** (-11.15)
Experience A+B								0.123*** (3.44)
Weight A		-3.809*** (-17.63)					-0.213 (-0.61)	-0.219 (-0.63)
Portfolio Return A			0.175* (1.75)				0.211* (1.95)	0.216** (1.98)
Portfolio Return B			0.279** (2.11)				0.269* (1.85)	0.273* (1.90)
Premium				1.879*** (6.03)			1.409*** (3.33)	1.411*** (3.39)
Portfolio Size					0.065** (2.32)		-0.079* (-1.70)	-0.061 (-1.45)
Age					0.201 (0.76)		-0.636 (-1.24)	-0.567 (-1.15)
Gender					0.011 (0.07)		-0.365 (-1.43)	-0.374 (-1.45)
Amihud A						0.695*** (8.88)	0.554*** (5.95)	0.552*** (5.92)
Amihud B						-0.541*** (-9.15)	-0.410*** (-4.28)	-0.402*** (-4.17)
StkRet A						-0.610 (-1.15)	-1.305 (-1.25)	-1.277 (-1.23)
StkRet B						0.475 (0.80)	1.424 (1.51)	1.397 (1.49)
STD A						-0.182*** (-2.88)	-0.299*** (-2.75)	-0.298*** (-2.79)
STD B						0.188*** (3.11)	0.222** (2.57)	0.220*** (2.59)
Skew A						0.058 (1.17)	0.198** (2.57)	0.193** (2.52)
Skew B						-0.107** (-2.54)	0.008 (0.11)	0.006 (0.08)
MktRet A						-1.470** (-2.46)	-3.076*** (-3.20)	-3.056*** (-3.23)
MktRet B						1.648*** (3.36)	2.183*** (2.81)	2.192*** (2.84)
Mkt Turnover A						0.016 (1.10)	0.071*** (2.82)	0.071*** (2.85)
Mkt Turnover B						-0.040*** (-3.06)	-0.067*** (-2.99)	-0.067*** (-2.99)
Constant	-2.713*** (-4.46)	-1.396 (-1.26)	-3.029*** (-2.90)	-5.378*** (-4.83)	-4.581*** (-3.18)	8.826*** (5.37)	8.090*** (3.29)	7.456*** (3.15)
Pseudo R ²	0.758	0.332	0.083	0.102	0.085	0.147	0.771	0.769
Obs.	16450	16450	16450	16432	15857	16425	15833	15833

*, **, and *** indicate significance at 10%, 5% and 1% level, respectively.

Table 4: Determinants of the purchase decisions: allowing for the investor fixed effect and for company-level specific experience

Buy B is the dependent variable, which is a dummy variable that equals 1 if an investor buys B-shares of any cross-listed firm, and 0 if the investor buys only A-shares. Model (1) allows for the investor fixed effect to control for the investor heterogeneity. Model (2) incorporates company-level specific experience variables. *Experience A* and *Experience B* are equal to $\log(1 + \text{total number of trades in A-shares})$ and $\log(1 + \text{total number of trades in B-shares})$, respectively. *Experience A: company level* and *Experience B: company level* are equal to $\log(1 + \text{total number of trades in the focal company's A-shares})$ and $\log(1 + \text{total number of trades in the focal company's B-shares})$, respectively. The focal company is the relevant company used to define the dependent variable and the firm characteristics. *Weight A* is the weight of A-shares in the total value of an investor's stock portfolio. *Portfolio Ret A (Portfolio Ret B)* is the return on an investor's A- (B-) share portfolio since the last trade. *Premium* is the A-share premium over the B-shares, which is calculated as the log difference between A-share price and B-share price. The prices of both A- and B-shares are measured in RMB. *Portfolio Size* is the log portfolio size, including both cash and stock. *Age* and *Gender* are the age and gender of the investor. *Gender* equals 1 for a male and 0 for a female investor. *StkRet A (StkRet B)* is the cumulative return on an investor's A (B) shares from the past 30 calendar days. *STD A (STD B)* is the standard deviation of A- (B-) share returns over the past 30 calendar days. *Skew A (Skew B)* is the skewness of A- (B-) share returns over the past 30 calendar days. *MktRet A (MktRet B)* is the market return on A (B) shares over the past 30 calendar days. *Mkt Turnover A (Mkt Turnover B)* is the average turnover of all of the A (B) shares. The month fixed effects are added but not reported. The period used is from February 19, 2001 to December 31, 2005. We use a logistic regression to estimate the parameters. All of the standard errors are clustered by investor.

	(1)	(2)
	<i>Controlling investor heterogeneity</i>	<i>Focal firm experience</i>
Experience A	-0.927*** (-8.70)	-0.734*** (-11.60)
Experience B	2.419*** (17.93)	1.062*** (14.69)
Experience A: company level		-1.844*** (-18.79)
Experience B: company level		1.055*** (13.67)
Weight A	0.148 (0.86)	0.172 (0.90)
Portfolio Return A	-0.075 (-0.62)	-0.082 (-0.46)
Portfolio Return B	0.263 (1.42)	0.615* (1.72)
Premium	1.367** (2.25)	0.515 (0.89)
Portfolio Size	-0.028 (-0.40)	-0.059 (-0.82)
Age		-0.034 (-0.08)
Gender		-0.163 (-0.61)
Amihud A	0.731*** (5.40)	0.393*** (3.27)
Amihud B	-0.691*** (-5.19)	-0.190** (-2.16)
StkRet A	-1.935 (-1.56)	-0.848 (-0.82)
StkRet B	1.337 (1.04)	1.138 (1.18)
STD A	-0.252* (-1.82)	-0.070 (-0.46)
STD B	0.294*** (2.62)	0.026 (0.19)
Skew A	0.153 (1.64)	0.037 (0.28)
Skew B	-0.049 (-0.51)	0.101 (0.85)
MktRet A	-2.699** (-2.33)	-2.598 (-1.42)
MktRet B	2.037** (2.03)	1.499 (1.23)
Mkt Turnover A	0.054** (2.17)	0.031 (0.77)
Mkt Turnover B	-0.081** (-2.48)	-0.051* (-1.76)
Constant	7.386*** (3.84)	-2.641 (-1.04)
Pseudo R ²	0.799	0.937
Obs.	15833	15833

*, **, and *** indicate significance at 10%, 5% and 1% level, respectively.

Table 5: Performance of investors in buying A- and B-shares

Panel A analyzes the performance from buying A-shares, and Panel B analyzes the performance from buying B-shares. We use a calendar time value-weighted portfolio to do the performance comparison. The “Performance” column is the return on the portfolio, mimicking the real trades by the investors. The “Benchmark” column is the return on the portfolio “opposite” to the real trades by the investors. That is, when investors are buying A (B) shares of a firm, the benchmark portfolio buys shares of the same firm from the opposite market. The “Difference” column is the difference between “Performance” and “Benchmark.” At the beginning of each month, all of the investors are sorted into two groups based on the *Experience A/B* variable, which is defined as $\log(1 + \text{total number of trades in A-share market}) - \log(1 + \text{total number of trades in B-share market})$. *Less/More* indicates less or more experience in trading A or B-shares.

Experience A/B	Performance	Benchmark	Difference	Performance	Benchmark	Difference	Performance	Benchmark	Difference
	Holding 1 month			Holding 2 months			Holding 3 months		
Panel A. The performance of buying A-shares									
Less	-0.245 (-0.19)	0.604 (0.37)	-0.849 (-0.73)	0.378 (0.32)	1.768 (1.13)	-1.390 (-1.24)	-0.233 (-0.22)	1.268 (0.84)	-1.501 (-1.42)
More	0.729 (-0.60)	3.204 (1.24)	-3.933 (-1.87)	-1.158 (-1.07)	2.018 (0.84)	-3.174 (-1.60)	-0.749 (-0.75)	2.278 (0.97)	-3.027 (-1.52)
More-Less	0.974 (0.27)	2.600 (0.85)	-3.080 (-1.28)	-1.530 (-0.96)	0.250 (0.09)	-1.780 (-0.78)	-0.515 (-0.35)	1.010 (0.36)	-1.530 (-0.67)
Panel B. The performance of buying B-shares									
Less	2.502 (1.25)	0.718 (0.60)	1.785 (1.11)	1.581 (0.80)	-0.113 (-0.10)	1.694 (1.08)	1.422 (0.73)	-0.133 (-0.12)	1.555 (0.99)
More	3.081 (1.13)	0.122 (0.10)	2.959 (1.23)	2.421 (0.91)	-0.406 (-0.33)	2.823 (1.23)	2.578 (1.05)	0.425 (0.39)	2.158 (0.98)
More-Less	0.578 (0.17)	-0.595 (-0.35)	1.170 (0.41)	0.840 (0.26)	-0.293 (-0.17)	1.130 (0.41)	1.160 (0.37)	0.557 (0.36)	0.598 (0.22)

Table 6: Market-specific experience and the responsiveness to A/B share premium and liquidity

Buy B is the dependent variable. This is a dummy variable that equals 1 if an investor buys B-shares of any cross-listed firm, and 0 if an investor buys only A-shares. *Experience A* and *Experience B* equal to log (1 + total number of trades in A-shares) and log (1 + total number of trades in B-shares), respectively. *Weight A* is the weight of A-shares in the total value of investor's stock portfolio. *Portfolio Ret A* (*Portfolio Ret B*) is the return of investor's A- (B-) share portfolio since the last trade. *Premium* is the A-share over the B-share premium, which is calculated as the log difference between the A-share price and the B-share price. The prices of both A-shares and B-shares are measured in RMB. *Portfolio Size* is the log portfolio size, including both cash and stock. *Gender* equals 1 for a male and 0 for a female investor. *StkRet A* (*StkRet B*) is the cumulative return on A (B) shares over the past 30 calendar days. *STD A* (*STD B*) is the standard deviation of A- (B-) share returns over the past 30 calendar days. *Skew A* (*Skew B*) is the skewness of A- (B-) share returns over the past 30 calendar days. *MktRet A* (*MktRet B*) is the A- (B-) market return over the past 30 calendar days. *Mkt Turnover A* (*Mkt Turnover B*) is the average turnover of all of the A (B) shares. The year fixed effects are added but not reported. The period used is from February 19, 2001 to December 31, 2005. We use a logistic regression to estimate the parameters. All of the standard errors are clustered by investor.

	(1)	(2)	(3)	(4)	(5)	(6)
Experience A	-0.823*** (-12.32)	-0.777*** (-10.21)	-1.469*** (-6.68)	-1.434*** (-6.53)	-1.138*** (-13.22)	-1.091*** (-14.23)
Experience B	0.843*** (7.38)	0.867*** (9.14)	1.538*** (8.91)	1.534*** (8.09)	1.213*** (11.48)	1.218*** (13.12)
Experience A * Premium	-0.362** (-2.09)	-0.365** (-2.33)				
Experience B * Premium	0.520*** (5.29)	0.510*** (4.52)				
Experience A * Amihud A			-0.071*** (-2.70)	-0.071*** (-2.78)		
Experience B * Amihud A			0.065*** (3.58)	0.061*** (3.02)		
Experience A * Amihud B					-0.029 (-1.26)	-0.027 (-1.37)
Experience B * Amihud B					0.021 (0.64)	0.017 (0.71)
Weight_A		-0.192 (-0.56)		-0.200 (-0.58)		-0.200 (-0.58)
Portfolio Return A		0.208** (1.98)		0.205* (1.94)		0.212** (1.98)
Portfolio Return B		0.269* (1.85)		0.269* (1.85)		0.269* (1.85)
Premium	0.562 (0.66)	0.268 (0.34)		1.426*** (3.32)		1.423*** (3.28)
Portfolio Size		-0.079* (-1.72)		-0.079* (-1.70)		-0.082* (-1.74)
Age		-0.644 (-1.28)		-0.642 (-1.25)		-0.642 (-1.25)
Gender		-0.350 (-1.41)		-0.366 (-1.45)		-0.367 (-1.46)
Amihud A		0.558*** (6.05)	0.615*** (4.08)	0.567*** (4.09)	0.624*** (7.73)	0.556*** (5.95)
Amihud B		-0.409*** (-4.25)	-0.407*** (-4.78)	-0.407*** (-4.28)	-0.376*** (-3.85)	-0.369*** (-3.78)
StkRet A		-1.337 (-1.26)		-1.284 (-1.25)		-1.270 (-1.21)
StkRet B		1.431 (1.52)		1.382 (1.48)		1.378 (1.44)
STD A		-0.302*** (-2.74)		-0.290*** (-2.73)		-0.303*** (-2.77)
STD B		0.222** (2.55)		0.223*** (2.58)		0.221** (2.56)
Skew A		0.203*** (2.61)		0.199*** (2.58)		0.197** (2.57)
Skew B		0.007 (0.09)		0.010 (0.14)		0.009 (0.12)
MktRet A		-3.075*** (-3.20)		-3.068*** (-3.20)		-3.076*** (-3.16)
MktRet B		2.145*** (2.78)		2.192*** (2.82)		2.198*** (2.80)
Mkt Turnover A		0.071*** (2.86)		0.069*** (2.81)		0.071*** (2.84)
Mkt Turnover B		-0.068*** (-3.06)		-0.066*** (-2.95)		-0.067*** (-3.05)
constant	-4.010*** (-3.46)	1.338 (0.48)	-0.432 (-0.48)	0.635 (0.25)	-0.203 (-0.26)	0.795 (0.33)
Pseudo R ²	0.762	0.771	0.768	0.771	0.768	0.771
Obs.	16432	15833	16426	15833	16426	15833

*, **, and *** indicate significance at 10%, 5% and 1% level, respectively.

Table 7: Performance of investors in buying A- and B-shares in high and low premium market conditions

We examine the trading performance of investors by their relative experience in the A- and B-share markets (*Experience A/B*) at different market conditions (low market premium vs. high market premium). The *Experience A/B* variable is defined as $\log(1 + \text{total number of trades in the A-share market}) - \log(1 + \text{total number of trades in the B-share market})$. *Less/More* indicates less or more experience in the A or B markets. *Market premium* is the average premium of all of the cross-listed A/B shares, with the premium calculated as the log difference between A-share and B-share prices. We use the calendar portfolio method to try mimicking the purchases of investors. For each purchase by the investor, we buy the same share at the close of the next trading day. These shares are held for 1, 2 and 3 months. All of the portfolio returns are value-weighted, with the weights being the market value of the shares in the portfolio at the beginning of each day. The reported monthly returns are compounded from the daily calendar portfolio returns. At the beginning of each month, all of the investors are sorted into two groups based on the sample median. The group of investors with total portfolio size (summation of all of the stocks and the cash balance) above the sample median is called the large investors, and the others are called the small investors.

	Low Prem	High Prem	High-Low	Low Prem	High Prem	High-Low	Low Prem	High Prem	High-Low
Holding period	1 month			2 months			3 months		
Panel A. All investors									
Less	-0.592 (-0.35)	5.674 (1.98)	6.266 (1.90)	-0.915 (-0.60)	4.739 (1.88)	5.654 (1.93)	-0.690 (-0.44)	3.297 (1.33)	3.987 (1.36)
More	-1.222 (-0.86)	1.884 (0.76)	3.106 (1.09)	-0.709 (-0.53)	1.193 (0.55)	1.902 (0.75)	-0.661 (-0.55)	1.046 (0.50)	1.707 (0.71)
More-Less	-0.630 (0.54)	-3.790 (3.16)	-3.160 (1.83)	0.206 (0.23)	-3.546 (3.07)	-3.752 (2.52)	0.029 (0.03)	-2.251 (1.83)	-2.280 (1.42)
Panel B. Small investors									
Less	-1.425 (-0.91)	5.722 (1.87)	7.147 (2.10)	-1.637 (1.15)	4.853 (1.75)	6.490 (2.10)	-1.320 (-0.93)	3.673 (1.36)	4.993 (1.64)
More	-0.958 (-0.68)	0.723 (0.38)	1.681 (0.72)	-1.214 (-0.86)	0.142 (0.08)	0.147 (0.61)	-0.478 (-0.35)	-0.513 (-0.30)	-0.035 (0.02)
More-Less	0.467 (0.55)	-4.999 (3.22)	-5.466 (3.26)	0.423 (0.43)	-4.711 (2.77)	-6.343 (2.65)	0.842 (0.82)	-4.186 (2.45)	-5.028 (2.51)
Panel B. Large investors									
Less	0.064 (0.03)	5.063 (1.79)	4.999 (1.47)	-0.752 (-0.48)	4.383 (1.72)	5.135 (1.74)	-0.562 (-0.35)	2.781 (1.13)	3.343 (1.14)
More	-0.787 (-0.53)	2.913 (1.08)	3.700 (1.21)	-0.314 (-0.23)	1.548 (0.67)	1.862 (0.69)	-0.680 (-0.56)	2.126 (1.02)	2.806 (1.16)
More-Less	-0.851 (0.56)	-2.150 (1.54)	-1.299 (0.60)	0.438 (0.33)	-2.835 (2.40)	-3.273 (2.03)	-0.118 (0.11)	-0.655 (0.44)	-0.537 (0.26)

Table 8. Market-specific experience and purchase decisions: the small vs. the large investors

In this table, we examine whether more sophisticated investors are less affected by trading experience. At the beginning of each month, all of the investors are sorted into two groups based on the sample median. The group of investors with total portfolio size (summation of all of the stocks and the cash balance) above the sample median is called the large investors, and the others are called the small investors. *Buy B* is the dependent variable. This is a dummy variable that equals 1 if an investor buys B-shares of any cross-listed firm, and 0 if an investor buys only A-shares. *Experience A* and *Experience B* are equal to $\log(1 + \text{total number of trades in A-shares})$ and $\log(1 + \text{total number of trades in B-shares})$, respectively. *Weight A* is the weight of A-shares in the total value of investor's stock portfolio. *Portfolio Ret A* (*Portfolio Ret B*) is the return on an investor's A- (B-) share portfolio since the last trade. *Premium* is the A-share over the B-share premium, which is calculated as the log difference between the A-share and the B-share prices. The prices of both A-shares and B-shares are measured in RMB. *Portfolio Size* is the log portfolio size, including both cash and stocks. *Gender* equals 1 for a male and 0 for a female investor. *StkRet A* (*StkRet B*) is the cumulative return of the A (B) shares from the past 30 calendar days. *STD A* (*STD B*) is the standard deviation of A- (B-) share returns over the past 30 calendar days. *Skew A* (*Skew B*) is the skewness of A- (B-) share returns over the past 30 calendar days. *MktRet A* (*MktRet B*) is the A- (B-) market return over the past 30 calendar days. *Mkt Turnover A* (*Mkt Turnover B*) is the average turnover of all of the A (B) shares. The year fixed effects are added but not reported. The period used is from February 19, 2001 to December 31, 2005. We use a logistic regression to estimate the parameters. All of the standard errors are clustered by investor.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Small Investors	Large Investors	Small Investors	Large Investors	Small Investors	Large Investors	Small Investors	Large Investors
Experience A	-1.242*** (-14.34)	-0.928*** (-13.26)	-1.243*** (-7.11)	-0.680*** (-8.28)	-4.518*** (-3.07)	-1.683*** (-2.59)	-1.303*** (-8.05)	-1.014*** (-13.07)
Experience B	1.456*** (17.85)	1.013*** (14.38)	1.060*** (6.74)	0.702*** (7.72)	4.236*** (3.30)	1.449*** (2.74)	1.431*** (8.76)	1.047*** (9.54)
Experience A * Premium			-0.375 (-1.11)	-0.217 (-1.25)				
Experience B * Premium			0.926*** (2.97)	0.476*** (3.55)				
Experience A * Amihud A					-0.160** (-2.31)	-0.037 (-1.16)		
Experience B * Amihud A					0.135** (2.25)	0.021 (0.86)		
Experience A * Amihud B							-0.015 (-0.50)	-0.018 (-1.03)
Experience B * Amihud B							-0.004 (-0.12)	0.006 (0.30)
Weight A	-0.030 (-0.15)	-0.036 (-0.13)	-0.342 (-0.87)	-0.025 (-0.11)	-0.021 (-0.11)	-0.028 (-0.10)	-0.017 (-0.09)	-0.018 (-0.07)
Portfolio Return A	-0.128 (-0.74)	0.325*** (3.21)	0.153 (0.63)	0.212* (1.85)	-0.134 (-0.79)	0.323*** (3.19)	-0.125 (-0.72)	0.327*** (3.22)
Portfolio Return B	0.275 (1.13)	0.309* (1.66)	0.556 (1.56)	0.184 (1.06)	0.275 (1.15)	0.308 (1.64)	0.274 (1.13)	0.308* (1.65)
Premium	-0.021 (-0.04)	2.633*** (5.34)	-0.939 (-0.79)	-0.573 (-0.37)	-0.019 (-0.03)	2.645*** (5.32)	-0.016 (-0.03)	2.639*** (5.29)
Portfolio Size	-0.071	-0.064	-0.032	-0.108**	-0.065	-0.065	-0.070	-0.068

Age	(-0.87) 0.138 (0.45)	(-1.27) -1.294** (-2.18)	(-0.46) -0.116 (-0.26)	(-1.98) -0.915 (-1.63)	(-0.80) 0.117 (0.38)	(-1.28) -1.299** (-2.17)	(-0.86) 0.143 (0.47)	(-1.30) -1.309** (-2.20)
Gender	0.055 (0.29)	-0.696** (-2.51)	-0.072 (-0.25)	-0.445* (-1.66)	0.041 (0.22)	-0.694** (-2.50)	0.048 (0.25)	-0.701** (-2.53)
Amihud A	0.668*** (4.58)	0.517*** (4.64)	0.621*** (3.75)	0.546*** (5.04)	0.701*** (3.74)	0.594*** (3.14)	0.668*** (4.59)	0.520*** (4.67)
Amihud B	-0.465*** (-3.22)	-0.410*** (-4.60)	-0.354*** (-3.15)	-0.455*** (-4.12)	-0.463*** (-3.17)	-0.407*** (-4.59)	-0.363*** (-2.80)	-0.346** (-2.50)
StkRet A	-2.592** (-1.98)	-0.658 (-0.52)	-3.149* (-1.73)	-0.908 (-0.71)	-2.627* (-1.95)	-0.633 (-0.51)	-2.514* (-1.92)	-0.632 (-0.50)
StkRet B	1.675 (1.44)	0.819 (0.55)	1.499 (1.10)	1.119 (0.89)	1.602 (1.36)	0.788 (0.54)	1.583 (1.35)	0.786 (0.52)
STD A	-0.226 (-1.52)	-0.427*** (-3.18)	-0.315* (-1.94)	-0.296** (-2.25)	-0.220 (-1.46)	-0.427*** (-3.17)	-0.230 (-1.55)	-0.431*** (-3.15)
STD B	0.247 (1.63)	0.289*** (2.75)	0.369** (2.18)	0.226** (2.04)	0.255* (1.68)	0.287*** (2.76)	0.249* (1.66)	0.288*** (2.73)
Skew A	0.220** (1.97)	0.201** (2.00)	0.010 (0.05)	0.230*** (2.61)	0.227** (2.02)	0.200** (1.99)	0.221** (1.97)	0.200** (2.00)
Skew B	-0.150 (-1.36)	0.074 (0.75)	0.048 (0.27)	-0.022 (-0.23)	-0.150 (-1.36)	0.077 (0.78)	-0.155 (-1.41)	0.074 (0.74)
MktRet A	-3.754** (-2.43)	-2.886** (-2.31)	-2.286 (-1.01)	-3.384*** (-2.77)	-3.729** (-2.43)	-2.904** (-2.33)	-3.641** (-2.34)	-2.934** (-2.35)
MktRet B	3.021** (2.51)	2.587** (2.46)	3.346** (2.28)	2.165** (2.24)	3.071** (2.53)	2.600** (2.46)	2.957** (2.43)	2.630** (2.47)
Mkt Turnover A	0.096** (2.41)	0.069** (2.52)	0.093 (1.54)	0.064** (2.47)	0.095** (2.47)	0.069** (2.51)	0.095** (2.40)	0.069** (2.53)
Mkt Turnover B	-0.105*** (-3.15)	-0.056* (-1.86)	-0.124*** (-3.47)	-0.054* (-1.84)	-0.106*** (-3.12)	-0.055* (-1.83)	-0.100*** (-2.89)	-0.055* (-1.93)
constant	-1.487 (-0.49)	8.650*** (3.35)	1.781 (0.40)	12.482*** (3.89)	-2.144 (-0.55)	10.283** (2.08)	-0.914 (-0.27)	9.151*** (3.27)
Pseudo R ²	0.837	0.730	0.890	0.716	0.838	0.730	0.838	0.730
Obs.	6880	8874	5699	10114	6880	8874	6880	8874

*, **, and *** indicate significance at 10%, 5% and 1% level, respectively.

- 1) The Chi-square test of the difference between *Experience A* in Models (1) and (2) is 14.66, $p < 0.001$.
- 2) The Chi-square test of the difference between *Experience B* in Models (1) and (2) is 29.92, $p < 0.001$.
- 3) The Chi-square test of the difference between *Experience A*Premium* in Models (3) and (4) is 1.73, $p = 0.19$.
- 4) The Chi-square test of the difference between *Experience B*Premium* in Models (3) and (4) is 0.12, $p = 0.73$.
- 5) The Chi-square test of the difference between *Experience A*Premium* in Models (5) and (6) is 2.99, $p = 0.08$.
- 6) The Chi-square test of the difference between *Experience B*Premium* in Models (5) and (6) is 4.09, $p = 0.04$.
- 7) The Chi-square test of the difference between *Experience B*Premium* in Models (7) and (8) is 0.10, $p = 0.76$.
- 8) The Chi-square test of the difference between *Experience B*Premium* in Models (7) and (8) is 0.15, $p = 0.70$.

Appendix:

Table A1: Summary of variables

This table presents the summary of the variables that will be used in the regression analysis. *Experience A* and *Experience B* are equal to $\log(1 + \text{total number of trades in A-shares})$ and $\log(1 + \text{total number of trades in B-shares})$, respectively. *Weight A* is the weight of A-shares in the total value of investor's stock portfolio. *Portfolio Ret A* (*Portfolio Ret B*) is the return on investor's A- (B-) share portfolio since the last trade. *Premium* is the A-share over the B-share premium, which is calculated as the log difference between the A-share and B-share prices. The prices of both A-shares and B-shares are measured in RMB. *Portfolio Size* is the log portfolio size, including both cash and stock. *Age* and *Gender* are the age and gender of the investor. *Gender* equals 1 for a male and 0 for a female investor. *Amihud A* (*Amihud B*) is calculated following Amihud (2002), using the past 30 days' data. *StkRet A* (*StkRet B*) is the cumulative return on the A (B) shares in the past 30 calendar days. *STD A* (*STD B*) is the standard deviation of A- (B-) share return over the past 30 calendar days. *Skew A* (*Skew B*) is the skewness of A- (B-) share returns over the past 30 calendar days. *MktRet A* (*MktRet B*) is the A- (B-) market return over the past 30 calendar days. *Mkt Turnover A* (*Mkt Turnover B*) is the average turnover of all of the A (B) shares. The period used is from February 19, 2001 to December 31, 2005.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
MEAN	2.6	5	0.37	0.04	-0.02	0.57	13.39	3.74	0.4	-20.22	-4.84	0.03	0.11	0.02	0.03	0.12	0.03	0.01	0.16	13.54	12.69
STD	3	2.6	0.39	0.41	0.31	0.23	2.52	0.28	0.49	1.11	2.66	0.12	0.26	0.01	0.01	0.76	0.82	0.12	0.44	5.67	16.22
1 Experience A	1																				
2 Experience B	-0.22	1																			
3 Weight A	0.53	-0.40	1																		
4 Portfolio Ret A	0.18	0.10	0.18	1																	
5 Portfolio Ret B	0.08	0.07	-0.07	0.25	1																
6 Premium	-0.04	0.07	-0.04	-0.01	0.02	1															
7 Portfolio Size	0.16	0.26	0.18	0.29	0.14	-0.02	1														
8 Age	0.12	0.12	0.09	0.02	-0.02	-0.03	-0.03	1													
9 Gender	-0.02	0.01	-0.01	-0.05	-0.02	0.04	-0.07	0.05	1												
10 Amihud A	-0.05	0.07	-0.03	-0.02	-0.01	0.27	-0.10	-0.02	0.05	1											
11 Amihud B	-0.05	-0.05	-0.01	-0.04	0.01	0.19	-0.07	-0.08	0.01	0.33	1										
12 StkRet A	0.02	-0.05	0.00	0.01	0.02	0.01	0.01	-0.01	-0.03	-0.24	-0.09	1									
13 StkRet B	-0.17	0.03	-0.14	-0.03	0.02	-0.05	0.01	-0.08	-0.04	-0.12	0.58	0.39	1								
14 STD A	0.09	-0.04	0.06	0.00	0.01	0.29	-0.01	0.02	0.03	0.06	0.12	0.21	0.01	1							
15 STD B	-0.21	0.07	-0.19	-0.05	0.02	0.08	0.03	-0.11	-0.02	-0.04	0.41	0.06	0.58	0.24	1						
16 Skew A	0.01	-0.03	0.01	0.02	0.01	-0.01	0.00	0.02	-0.02	-0.06	-0.21	0.26	-0.05	0.03	-0.11	1					
17 Skew B	0.09	-0.05	0.08	0.02	0.00	0.02	-0.02	0.04	0.02	0.09	-0.17	0.11	-0.23	0.15	-0.20	0.33	1				
18 MktRet A	0.00	-0.01	-0.01	-0.01	0.02	-0.10	0.01	-0.01	-0.02	-0.17	0.05	0.61	0.44	0.07	0.11	0.15	0.07	1			
19 MktRet B	-0.19	0.04	-0.15	-0.04	0.02	-0.04	0.02	-0.09	-0.04	-0.06	0.63	0.20	0.93	-0.06	0.60	-0.09	-0.26	0.45	1		
20 Mkt Turnover A	-0.04	0.00	-0.08	-0.02	0.04	-0.16	0.01	-0.04	-0.04	-0.32	-0.16	0.36	0.18	0.05	0.15	0.09	-0.12	0.54	0.19	1	
21 Mkt Turnover B	-0.26	0.06	-0.23	-0.06	0.04	-0.14	0.03	-0.13	-0.04	-0.14	0.27	0.13	0.69	-0.19	0.66	-0.04	-0.39	0.28	0.75	0.42	1

Table A2: The mean reversion of premium

This table shows the mean reversion of the average A- or B-share premium. The dependent variables are *A market return* (Panel A), *B market return* (Panel B) and the difference between *A market return* and *B market return* (Panel C). The *A market return* (*B market return*) is the value weighted average return of all of the cross-listed A (B) shares. We tried these variables from month $t+1$ to month $t+3$. The independent variable is the average A/B share premium.

	$t+1$	$t+2$	$t+3$
Panel A. A-share market return			
Average A/B premium t	0.086 (1.13)	0.042 (0.55)	0.034 (0.44)
Constant	-0.066 (-1.31)	-0.038 (-0.77)	-0.034 (-0.66)
R ²	0.022	0.005	0.004
Panel B. B-share market return			
Average A/B premium t	0.847*** (7.24)	0.229** (2.31)	0.249** (2.51)
Constant	-0.545*** (-7.07)	-0.157** (-2.41)	-0.171*** (-2.63)
R ²	0.483	0.089	0.105
Panel C. A-share market return – B-share market return			
Average A/B premium t	-0.761*** (-9.19)	-0.187*** (-2.79)	-0.215*** (-3.26)
Constant	0.480*** (8.79)	0.119*** (2.68)	0.137*** (3.18)
R ²	0.602	0.124	0.164

*, **, and *** indicate significance at 10%, 5% and 1% level, respectively.