A Liberalization Spillover: From Equities to Loans

Internet Appendices

Xin Liu, Shang-Jin Wei, and Yifan Zhou

Appendix A1: Stock Price, Firm Investment and Loan Volume

In this appendix, we examine whether a listed firm's ability to obtain loans is linked to its stock price. We first test the effect in the pre-QFII period (i.e. 1990 – 2002) and note that during this time period, there were no corporate bonds. An increase in a firm's debt is essentially an increase in the firm's borrowing from banks. Funding for a firm's investment comes mainly from corporate savings (retained earnings), borrowing from banks, and seasonal offering on the stock market.[1] We also extend our sample to 2018 and re-examine the effect.

We start with examining whether firms manage to increase their investment in response to stock price increases. Our specification is guided by a Q-model. An increase in Tobin's Q (as reflected in higher stock prices) suggests the arrival of growth opportunities. To exploit these, firms may need to raise funds through either equity issuance or additional debt. However, the regulatory frictions in the Chinese stock market may deter firms' ability to exploit such growth opportunity. Therefore, we first examine whether an increase in Q indeed leads to a higher investment. If the answer to the first question is affirmative, then we move on to examine whether some of the funding to support these investments is raised by issuing debt. An affirmative answer to the second question would provide evidence of linkage between bank loans and stock prices. A positive relation between changes in firms' debt and

[1] During this time period, there were no corporate bonds in China. Therefore, an increase in a firm's debt is essentially an increase in the firm's borrowing from banks.

stock prices would indicate that banks extend more credit to firms experiencing increases in stock price.

Table A1 provides the results. Results in columns 1 and 4 answer our first question. In column 1, we find that on average changes in firm investment responds positively and significantly to any changes in Tobin's Q. One standard deviation increase in delta Q translates to a 34% (=1.285*0.015/0.057) increase in the firm investment. Column 4 confirms the association between changes in firm investment and Q using the sample period from 1990 to 2018.

Next, we show that, controlling for seasoned equity offering, firms' debt level also increases as stock price increases. In columns 2 and 5, the dependent variable is change in the amount of debt from *t*-1 to *t*, scaled by the firm's asset in *t*-1. In columns 3 and 6, the dependent variable is the difference between log value of debt in *t* and the value in *t*-1. In both specifications, we find that the firm is able to increase its debt following an increase in Q from *t*-2 to *t*-1.

Overall, the evidence suggests that even before the introduction of the QFII program, a listed firm's ability to borrow is linked to its stock price, and that the bank loan and equity markets are not completely segregated. On balance, an increase in Tobin's Q is associated with increased debts. This set of evidence lends further plausibility to a possible spillover from a change in stock prices to a change in the loan market.

Appendix A2: Hedge Ratio and DIFCOV

In this appendix, we couple a simple model with empirical observations to highlight the interaction between cost of debt and DIFCOV through the hedge ratio (h). A firm has assets *V* made up of equity *E* and debt *D*, which are simultaneously repriced. The exogenous cash flow process $C_{i,t}$ follows

$$\frac{dC_i}{C_i} = g_i dt + \sigma_i dB, \tag{A1}$$

where B is a d-dimensional Brownian motion. Cash flow growth rate g_i and volatility row vector σ_i are constants. Assuming a constant riskless rate r and a constant price of risk vector $\lambda = \gamma\sigma_M'$, where σ_M is the volatility vector of the domestic market portfolio, gives us a stochastic discount factor

$$m_t = e^{-rt-|\lambda|^2 t/2-\lambda' B_t}. \tag{A2}$$

Firm value as in a Gordon growth model:

$$V_{i,t} = E_t\left\{\int_0^\infty \frac{m_u}{m_t} C_{i,u} du\right\} = \frac{C_{i,t}}{r+\sigma_i\lambda-g_i} = \frac{C_{i,t}}{r+\gamma\mathrm{cov}\left(\frac{dC_i}{C_i}, R_M\right)-g_i}. \tag{A3}$$

Assume that debt is a zero maturing at time T with face value K and equity receives the flow of C until time T and any residual of firm value over K. Let the asset payout rate $\delta \equiv C_{i,t}/V_{i,t} = r + \gamma\mathrm{cov}(dC_i/C_i, R_M) - g_i$, so that $V_{i,t} = C_{i,t}/\delta$, giving us

$$E_{i,t} = \frac{C_{i,t}}{\delta}\left(1-e^{-\delta(T-t)}\right) + \frac{C_{i,t}}{\delta}e^{-\delta(T-t)}N(d_1) - Ke^{-r(T-t)}N(d_2) \tag{A4}$$

and

$$\mathrm{D_{i,t}} = \mathrm{V_{i,t}} - \mathrm{E_{i,t}} = \frac{\mathrm{C_{i,t}}}{\delta} \mathrm{e}^{-\delta(\mathrm{T-t})}\left(1 - \mathrm{N(d_1)}\right) + \mathrm{Ke}^{-\mathrm{r(T-t)}}\mathrm{N(d_2)}, \tag{A5}$$

where

$$\mathrm{d_1} = \left[\ln\left(\frac{\frac{\mathrm{C_{i,t}}}{\delta}\mathrm{e}^{-\mathrm{r(T-t)}}}{\mathrm{Ke}^{-\mathrm{r(T-t)}}}\right) + |\sigma_\mathrm{i}|^2(\mathrm{T-t})/2\right] / |\sigma_\mathrm{i}|\sqrt{\mathrm{T-t}} \tag{A6}$$

and $d_2 = d_1 - |\sigma_i|\sqrt{T-t}$. The required risk premia on debt and equity are $\frac{\partial D_{i,t}/D_{i,t}}{\partial V_{i,t}/V_{i,t}} \cdot \gamma\mathrm{cov}(dC_i/C_i, R_M)$ and $\frac{\partial E_{i,t}/E_{i,t}}{\partial V_{i,t}/V_{i,t}} \cdot \gamma\mathrm{cov}(dC_i/C_i, R_M)$, respectively, where

$$\frac{\partial \mathrm{D_{i,t}}}{\partial \mathrm{V_{i,t}}} = \mathrm{e}^{-\delta(\mathrm{T-t})}\left(1 - \mathrm{N(d_1)}\right) \tag{A7}$$

and

$$\frac{\partial \mathrm{E_{i,t}}}{\partial \mathrm{V_{i,t}}} = 1 - \mathrm{e}^{-\delta(\mathrm{T-t})}\left(1 - \mathrm{N(d_1)}\right). \tag{A8}$$

From here, we can see that the equity risk premium $\frac{\partial E_{i,t}/E_{i,t}}{\partial V_{i,t}/V_{i,t}} \cdot \gamma\mathrm{cov}(dC_i/C_i, R_M) = \gamma\mathrm{cov}(dE_i/E_i, R_M)$ and the debt risk premium in terms of the equity risk premium is indeed $h \cdot \gamma\mathrm{cov}(dE_i/E_i, R_M)$, where $h = \frac{\partial D_{i,t}/D_{i,t}}{\partial E_{i,t}/E_{i,t}} = \frac{\partial D_{i,t}/V_{i,t}}{\partial E_{i,t}/V_{i,t}}\frac{E_{i,t}}{D_{i,t}}$.

Notice that h is a function of δ, and thus a function of $\mathrm{cov}(dE_i/E_i, R_M)$, which feeds into DIFCOV. To examine the relation between h and DIFCOV, we first perform a simulation exercise where we fix all parameters except δ. A range of values for δ is plugged in to solve for D, which we then use to calculate our cost of debt.[2] Figure A1 plots the result of our simulation exercise. We can see an inversely relation between cost of debt and $\text{cov}(dE_i/E_i, R_M)$.

We are ultimately interested in the relation between cost of debt and DIFCOV, which $\text{cov}(dE_i/E_i, R_M)$ is a component of. To examine this, we turn our attention to the empirical observation that DIFCOV and $\text{cov}(dE_i/E_i, R_M)$ are positively related. This can be seen by running the regression $DIFCOV_i = \beta_0 + \beta_1 \text{cov}(dE_i/E_i, R_M) + \epsilon_i$. Using a sample of all A-share firms in June 2002, β_1 is positive and significant at the 1% level.

If we combine our two findings: (i) cost of debt and $\text{cov}(dE_i/E_i, R_M)$ are inversely related, and (ii) DIFCOV and $\text{cov}(dE_i/E_i, R_M)$ are positively related, we arrive at the conclusion that cost of debt and DIFCOV should be inversely related.

Appendix A3: Predicting Changes in Loan Cost with Firm-specific Hedge Ratios

In this appendix, we explore whether firm-specific measures of the hedge ratio can improve our model's explanatory power for observed changes in the loan costs. In particular, we estimate the following specification, which is a counterpart to equation (11),

$$\Delta S_i = b_0 + b_1(h_i \times DIFCOV_i) + \delta' X_i + \varepsilon_i, \qquad (A9)$$

where h_i is an approximation of the firm-specific hedge ratio. We will experiment with a series of approximations that are motivated by the literature.

According to Schaefer and Strebulaev (2008), the hedge ratio h_i for firm i can be written as:

[2] We set $K = 40, C_0 = 20, r = 0.02, \lambda = 5, \sigma = 0.25$, and $T - t = 1$.

$$h_i = \left(\frac{1}{\Delta_i} - 1\right)\left(\frac{1}{L_i} - 1\right), \quad \text{(A10)}$$

where Δ_i is the delta of a European call option on the value of the firm and L_i is the market leverage. While L_i can be obtained from a firm's financial disclosure, Δ_i is, according to the option theory, a more complicated object, and can be calculated as

$$\Delta_i = N\left(\frac{\ln\left(\frac{V_i}{D_i}\right) + \left(r + \frac{\sigma_{Ai}^2}{2}\right)T_i}{\sigma_{Ai}\sqrt{T_i}}\right), \quad \text{(A11)}$$

where *N* is the cumulative distribution function of a standard normal distribution. V_i is the value of the firm, D_i is the value of its debt, σ_{Ai}^2 is the asset volatility, r is the risk-free rate, and T_i is the (average) time to maturity for the firm's debt. As typical financial disclosure has coarse information on the maturity structure of the debt, T_i has to be inferred with noise. To compute σ_{Ai}^2, we will have to make additional assumptions, which inevitably introduce more errors. For these reasons, our first approximation of h_i assumes that Δ is a constant that is the same for all firms, and let cross-firm variations in h be dictated entirely by variations in $(1/L_i - 1)$. In such a regression, the average value of $(1/L_i - 1)$ is absorbed into the regression coefficient, b_1.

As our second approximation of h, we make a best effort at estimating Δ_i. This will first involve making some assumptions to calculate σ_{Ai}. Following Bharath and Shumway (2008), we calculate asset volatility as:

$$\sigma_{Ai} = \sigma_{Ei} \times \frac{E_i}{E_i + K_i}, \quad \text{(A12)}$$

where σ_{Ei} is the standard deviation in the firm's daily equity return in the year preceding the announcement of the QFII program. E_i is the market value of firm i's equity, and K_i is the sum of the book value of short-term debt and half of the book value of long-term debt.[3] The risk-free rate is proxied by the 10-year Chinese Treasury note rate just prior to the announcement of the QFII program. The average time to maturity is proxied by the value-weighted average time to maturity (in years) across each firm's pre-QFII loans. The combination of (A11) and (A12) gives the second approximation of $h_i = (1/\Delta_i - 1)(1/L_i - 1)$. Because the second approximation involves additional assumptions, there is no guarantee that it will empirically outperform the first approximation.

Friewald, Wagner, and Zechner (2013) show that the hedge ratio can also be expressed as the ratio of the volatility of equity to that of the debt, σ_{Ei}/σ_{Di}. As few Chinese firms issued corporate bonds during our sample period, and there is a scarcity of bank loans recorded in the database for any given firm, we are not able to reliably estimate a firm's debt volatility. Given these constraints, we propose as our third measure to let the variations in h be dictated by variations in σ_E. In other words, in the third specification, we use $(\sigma_{Ei} \times DIFCOV_i)$ to replace $(h_i \times DIFCOV_i)$ in equation (A9).

We report pairwise correlations among the three regressors in Table A2. The correlation between the first and the second measure is merely 0.26, and that between the first and the third one is -0.07. The correlation between the second and the third measures is 0.11.

For comparison, in column 1 of Panels A and B of Table A3, we first reproduce the regressions that assume h_i to be the same across all firms. The top panel uses change in AISD

[3] Vassalou and Xing (2004) outline two reasons for discounting long-term debt. First, firms need to service their long-term debt, and these interest payments are part of their short-term liabilities. Second, the size of the long-term debt affects the ability of a firm to roll over its short-term debt, and therefore reduces its risk of default. Replacing K_i with D_i (total debt) does not qualitatively change our results.

as the dependent variable, while the bottom panel uses TCB. They are the same regressions as in columns 3 and 6 of Table 3, with an identical list of control variables (though the coefficients on the control variables are not reported to save space). In columns 2 to 4, we replace the DIFCOV regressor with our first, second, and third proxies for firm-specific hedge ratio, respectively. Note that the coefficients on these regressors are not comparable given the construction of these variables. Instead, our focus is on the goodness of fit of the model, or the ability to predict cross-firm variations in the reduction in loan costs. The adjusted R^2 values in the baseline case (under the assumption of an identical h for all firms) are 0.365 and 0.342, respectively, when AISD and TCB are used as the dependent variable. In comparison, the adjusted R^2 values are between 0.179 and 0.320 when the proxies for the firm-specific hedge ratio are used. In other words, we find that none of the three proxies for firm-specific h delivers better performance than the baseline case that assumes the same h for all firms.

In column 5, we include both $(\sigma_{Ei} \times DIFCOV_i)$ and $(1/L_i - 1)$ in the regression, together with the same set of other firm controls. This yields a slightly better R^2, but it is still inferior to the baseline regression. In column 6, we include both $(\sigma_{Ei} \times DIFCOV_i)$ and $(1/\Delta_i - 1)(1/L_i - 1)$ in the regression, together with the other control variables. This also does not improve the predictive ability of the model.

To summarize, while in theory the Merton (1974) model implies a firm-specific hedge ratio, our best efforts at estimating the cross-firm variations in the hedge ratio do not result in any significant improvement in the predictive ability of the model for cross-firm variations in the loan cost reductions, relative to the simple baseline case that assumes the same hedge ratio for all firms.

Appendix A4: Changes in Other Loan Features

Besides changes in the loan cost, we also investigate whether and how a reduction in a firm's risk premium may affect the maturity feature of its bank loans and the relative reliance on term loans versus credit lines. These results are presented in Figure A2 and Table A4.

The key finding is that after the liberalization, those firms with a greater reduction in the risk premium also see a lengthening of their average loan maturity and an increase in term loans as a proportion of their total loans.

Appendix A5: Spillover to Nonlisted Firms

In this appendix, we examine whether equity market liberalization also spills over to lower costs of bank loans for nonlisted firms. If the loan costs to listed firms decline after the equity market liberalization, lenders will compete to give more loans to nonlisted firms, since loans to listed and nonlisted firms are substitutes from the lenders' point of view. This provides a plausible reason for the costs of loans to nonlisted firms to decline as well.

This is an intrinsically harder question to answer as data related to nonlisted firms, including information on bank loans, are much harder to obtain. For example, neither DealScan nor CSMAR covers any loans made to nonlisted firms in ways that are meaningful for our purposes. Moreover, without the corresponding stock prices by firm, we cannot compute DIFCOV and therefore cannot investigate the role of risk premium reduction as a spillover channel. These facts suggest that whatever we can do for nonlisted firms has to be at a much coarser level than for listed firms.

Our idea is to work with data on manufacturing firms covered in the Chinese Industrial Census. This census covers all manufacturing firms whose sales are above a threshold value (which is 5 million RMB in our sample period, or about 600,000 US dollars using the exchange rate at the end of 2002). We use annual data from 2000 to 2004 and restrict the sample to firms that are in the dataset both before and after 2002 (the year in which the QFII program was announced). We drop the observations in 2002 since the QFII program was announced in the middle of that year. A subset of the firms in our dataset are publicly listed firms, and we manually identify them by using a combination of information on firm names, industry, and locations of the firms' headquarters. (This is a fuzzy matching process as the names of a given firm in the listed firm database and in the industrial census may contain some variations.)

The industrial census data does not contain loan-level information (such as maturity of the loans or the interest rates). However, for each firm in a given year, it reports both total interest payments in that year as well as the monetary values of short-term and long-term debts. We will use interest payment in year *t* divided by the sum of short-term debt and long-term debt in the previous year as a proxy for the average interest rate for that firm in year *t*. This is clearly a noisy measure as both the interest payment and liability information reflect a mixture of debt obligations with potentially different costs of borrowing. For example, the interest rates on the short-term and long-term debt are likely to be different. Our proxy may be regarded as the true cost of borrowing plus an error term.

$$\frac{\mathrm{Interest}_{\mathrm{i,t}}}{(\mathrm{ST\ Debt}_{\mathrm{i,t-1}} + \mathrm{LT\ Debt}_{\mathrm{i,t-1}})} = \mathrm{True\ borrowing\ cost}_{\mathrm{i,t}} + \varepsilon_{\mathrm{i,t}}, \qquad \text{(A13)}$$

Since we use the proxy for the cost of borrowing as the dependent variable, the inference on the effect of the QFII program will be unbiased if the error term is a pure measurement error. We will run regressions that are variations of the following specification:

$$\frac{\mathrm{Interest}_{\mathrm{i,t}}}{(\mathrm{ST\ Debt}_{\mathrm{i,t-1}} + \mathrm{LT\ Debt}_{\mathrm{i,t-1}})} = \mathrm{b}_0 + \mathrm{b}_1\mathrm{Public}_i + \mathrm{b}_2\mathrm{Public}_{\mathrm{i}} * \mathrm{Post}_{\mathrm{t}} + \mathrm{b}_3\mathrm{Post}_{\mathrm{t}} + \delta' \mathrm{X}_{\mathrm{i,t-1}}$$

$$+ \mathrm{Industry\ (or\ Firm)\ FE} + \mathrm{Province\ FE} + \varepsilon_{\mathrm{i,t}}, \qquad \text{(A14)}$$

where *i* and *t* index firm and year, respectively. *PUBLIC* is a dummy that is equal ones if the firm is a publicly listed firm and zero otherwise; *POST* is a dummy denoting post-event years (i.e., 2003 and 2004); and *X* is a list of firm features that the industrial census captures, including asset (in log), leverage ratio, interest coverage ratio, sales growth, age, and dummies for state ownership (one if state-owned) and tangibility (one if in a sector with tangible assets above the median value). The interaction term between PUBLIC and POST captures any difference in interest rate change between listed and nonlisted firm. We include both industry fixed effects and location fixed effects. We cluster the standard errors at the firm level.

The assumption that the measurement error is purely random is not entirely innocuous. One source of the measurement error is different maturity structures across firms. For example, if Firm A happens to have more long-term debt than Firm B, and the long-term debt has a higher interest rate, then our measure would assign a higher cost of borrowing to Firm A even if it has identical interest rates for any given maturity. This *per se* does not matter for our inference as long as the distribution of maturity structure across firms is identical before and after the event. However, our previous evidence from the listed firms suggests that the average maturity of debt tends to rise after the QFII program's introduction (see Appendix A4). This means that without controlling for changes in the maturity structure, we may underestimate the true reduction in the interest rate after the QFII introduction. It may be useful to keep this possible bias in mind when interpreting our results below.

With 80,536 firms from the manufacturing census data, our sample is relatively large and contains 296,593 firm-year observations for our estimation window. To reduce the impact of outliers, we drop the observations for which the changes in the cost of debt are in both the top and bottom 5% of the sample.

Table A6 provides the results. From columns 1 to 3, we find negative and significant coefficients for *POST*, suggesting a reduction in average cost of debt in the periods after the financial opening. The magnitude of the estimate is economically significant. Column 1 shows an average decline of 32 bps in the borrowing cost after the QFII program's introduction. The magnitude becomes smaller when we include industry and province fixed effects in column 2. When we include further firm fixed effects in column 3, the magnitude becomes a 24 bps reduction in the interest rate.

We do not find a significant coefficient for the interaction terms between PUBLIC and POST. This suggests that the nonlisted firms experience almost the same amount of loan cost reduction as the listed firms.

To summarize, the evidence suggests that nonlisted manufacturing firms also share the benefit of lower costs of debt following an equity market liberalization.

Appendix A6: The Response of the Domestic Smart Money to the QFII Announcement

While the QFII liberalization in 2003 involved a smaller dollar amount than the Shanghai- and Shenzhen-Hong Kong Connect (HKC) programs in 2014 and 2016, it was the very first equity market liberalization program that opened the Chinese domestic A share market to foreign investors. If the presence of foreign investors can cause repricing of Chinese equities, the first opening would likely lead to a bigger qualitative change than the subsequent openings.[4] Moreover, Ma et al. (2021) shows that the importance of institutional

[4] Despite of the relatively small scale of the foreign ownership from QFII and HKC, there are a few differences between the two programs that could lead to the differential pricing effects. (1) QFII is the first capital market liberalization ever announced by the Chinese government. Besides the actual attracted foreign investment volume, QFII may elicit a stronger market response because it may be a signal to investors of potential future liberalization programs by the Chinese government. (2) There is some evidence that the HKC program has attracted short-term speculative trading from overseas investors to the Chinese equity market (Liu, Wang, and Wei (2021)). In contrast, the QFII program, by design, only brought in large foreign institutional investors, whose behavior is more likely to be based on fundamentals and conform better to asset pricing models. (3) If price correction from a risk-sharing

holdings grew significantly following QFII's introduction (reaching a peak as high as 30% of market shares).[5] Therefore, we argue that, by asking themselves what positions QFII institutions may take, "domestic smart money" plays an important role in the price correction process potentially ahead of QFII institutions.

We explore the role of "domestic smart money" in the price revaluation process associated with the QFII program. From the top 10 shareholders data for listed company in the WIND data base, we compute stock-level change in the shares of "domestic smart money." We test whether firms with a higher expected change in equity price (ΔE(r)) would see a larger increase in the holding by "domestic smart money" around the announcement of the QFII program. Given that QFII was announced during the second quarter of 2002, we compare the holding of "domestic smart money" at the end of 2002Q2 (immediately after QFII's announcement) with the level at the end of 2002Q1 (immediately prior to QFII's announcement).

Based on the shareholder information in WIND (cross-checked with shareholder category in CSMAR), we classify shareholders into 16 types, namely non-investment enterprises, insurance firms, banks, investment trusts, investment funds, charity funds, investment firms, consulting firms, state-owned investment entities, state-owned non-investment entities, foreign firms, individuals, securities firms, asset management firms, venture capital firms, and other institutions. We examine whether "domestic smart money" invests in a manner consistent with expected $\Delta E(r)$ immediately after the announcement of QFII using three reasonable combinations of the above types to define "domestic smart money." The results are reported in the Table A14. In columns 1 and 2, we include

---

perspective has been largely incorporated in QFII, one would expect a more limited price impact in later liberalizations such as the HKC program.

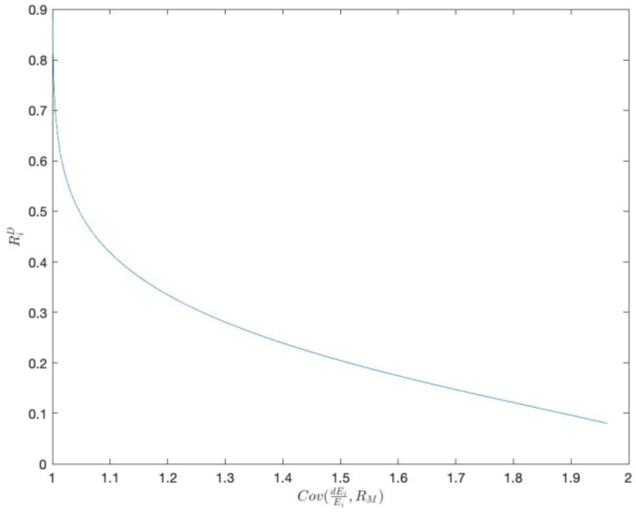
[5] One may argue that many large individual investors are in fact unregistered investment funds. So, the share of institutional investors that includes these unregistered investment funds is even higher.

investment funds, state-owned investment entities, and other investment firms as "domestic smart money". In columns 3 and 4, we expand the set by further including investment trusts. In columns 5 and 6, we consider all institutions to be "domestic smart money", except non-investment enterprises, charity funds, consulting firms, state-owned non-investment entities, and individuals.[6]

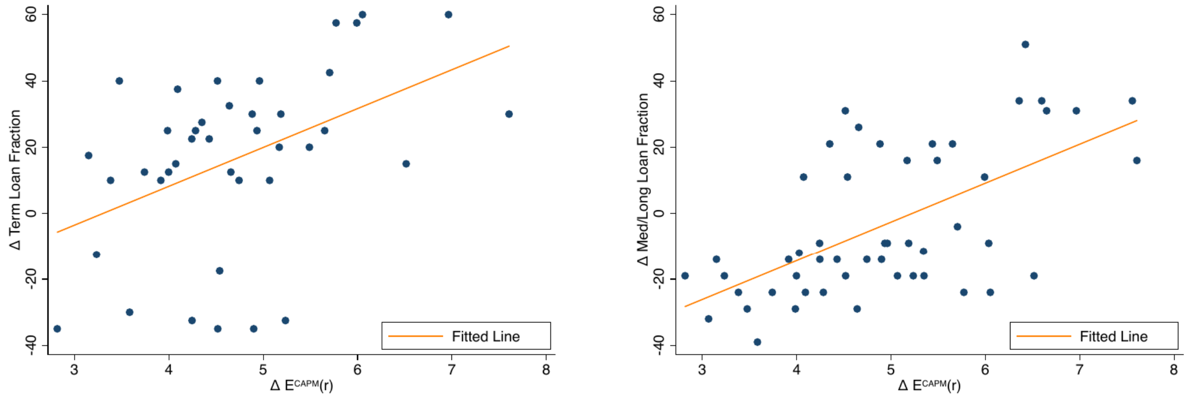
We observe that the coefficient of ΔE(r) is positive and significant across all columns, indicating that "domestic smart money" systematically raises their holdings of those stocks that the theory predicts a large increase in equity price. That is, a higher expected *ΔE(r)* corresponds to larger increases by "domestic smart money." These findings are consistent with our findings on the stock prices (Table 2) and support our conjecture that "domestic smart money" front runs QFII in buying up stocks that they expected QFII institutions would have placed a higher value on. As a result, the "threat" of QFII arrival can generate a systematic stock price revaluation even though the realized dollar amount of QFII investments is relatively small compared to the overall market capitalization.

[6] Here we exclude individuals who are among the top 10 shareholders in fewer than or equal to two firms. We consider individuals that hold large stakes in more than two firms as "smart money" since many large individual investors are in fact unregistered investment funds. Our results are quantitatively similar when all individuals are excluded.

Appendix Figure A1: Simulation results indicating that cost of debt and $\mathrm{cov}(dE_i/E_i, R_M)$ are inversely related.



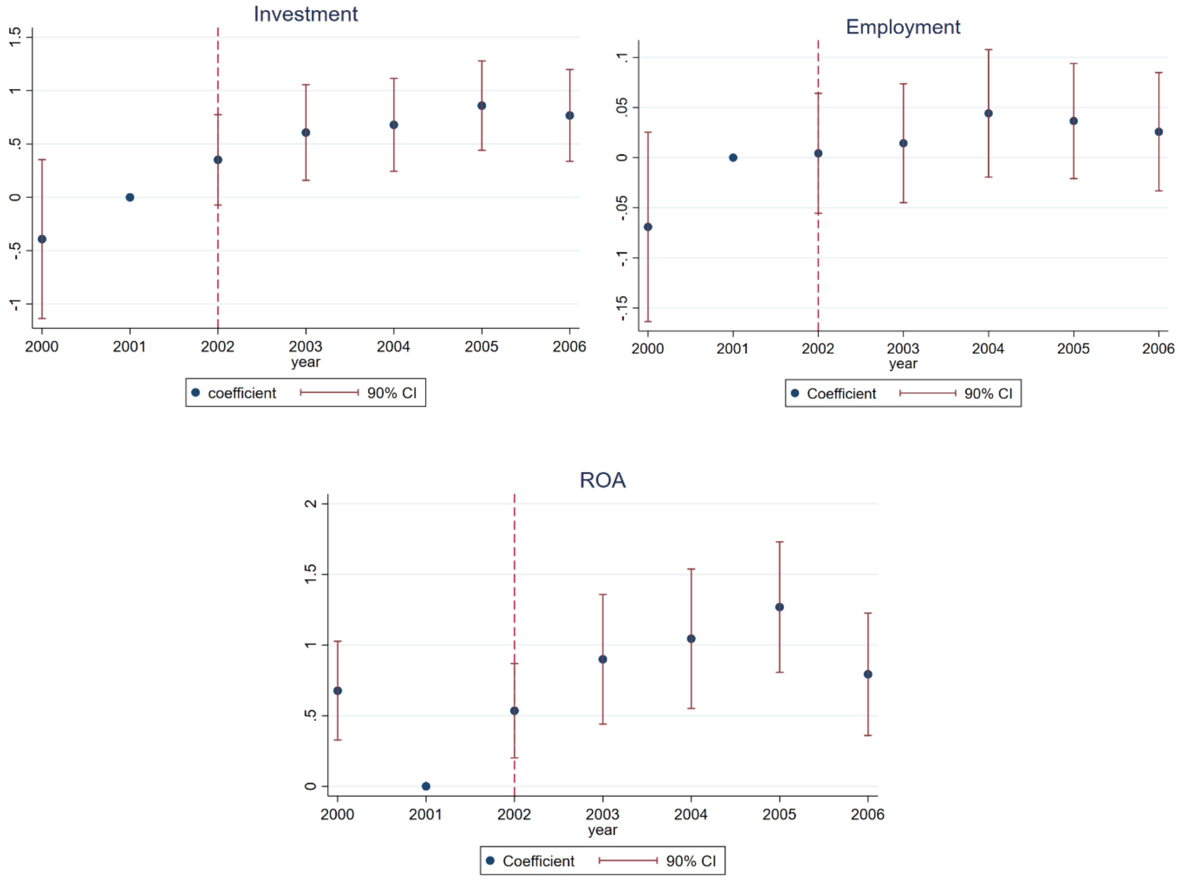
Appendix Figure A2: Changes in firms' fraction of term loans (left) and short loans (right) as a percentage of total number of loans against changes in expected stock returns under the CAPM. Firms with larger reductions in risk following the introduction of the QFII program choose to increase their term loans.



Appendix Figure A3: This figure plots the estimated coefficients $\widehat{\tau_t}$ and the 90% confidence interval in diff-in-diff regressions on firm investment, employment and ROA. The sample period is from 2000 to 2006. We follow the equation as below:

$$y_{i,t} = b_0 + \sum_{t=-2}^{4} \tau_t \mathrm{DIFCOV_i} \times \mathrm{T_t} + \delta' \mathrm{X_{i,t-1}} + \mathrm{IndustryYear\ FE} + \varepsilon_{i,t}$$

The dummy variable T_t equals 1 for the treatment group in year k and 0 otherwise. The point estimate immediately before the event year (2002) is normalized to zero.



Appendix Table A1: Firm Investment, Changes in Loans Volume Following Stock Price Changes in Pre-QFII Period

Table below provides the results of the effect of stock price movement on firm investment and changes in loan volume. In columns 1-3, we test the effect with a sample in the pre-QFII period from 1990 to 2002, while in columns 4-6, we test the sample from 1990 to 2018. In columns 1 and 4, the dependent variable is the change in firm investment from year *t*-1 to *t* and scaled by firm's total asset in *t*-1. In columns 2 and 5, the dependent variable is change in total debt outstanding from year *t*-1 to *t* over total asset in year *t*-1. In columns 3 and 6, dependent variable is the difference between log values of debt in *t*, and *t*-1. Independent variable ΔQ is the change in Tobin's Q, as measured by market-to-book ratio, from *t*-2 to *t*-1. We also control for *Q* at *t*-2 and include measures of SEO – normalized by total assets at *t*-1 and the logarithmic transformation of SEO value. Other control variables are at year *t*-1 and include log value of total asset (*Log(ASSETS)*), cash flow over lagged 1-year total asset (*CF/AT*) and book leverage (*LEVERAGE*). Firm fixed effects are controlled and standard errors are shown in parentheses and clustered by firm. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

		1990 – 2002			1990 – 2018	
	1	2	3	4	5	6
Dep. Variable:	$\Delta Invest_{i,t}$	$\Delta D_{i,t}/TA_{i,t-1}$	$Log(D_{i,t}/D_{i,t-1})$	$\Delta Invest_{i,t}$	$\Delta D_{i,t}/TA_{i,t-1}$	$Log(D_{i,t}/D_{i,t-1})$
$\Delta Q_{i,t-1}$	0.015***	0.005***	0.042***	0.014***	0.003***	0.032***
	(0.003)	(0.002)	(0.014)	(0.001)	(0.001)	(0.006)
$Q_{i,t-2}$	0.012***	0.009***	0.053***	0.007***	0.006***	0.045***
	(0.003)	(0.002)	(0.016)	(0.001)	(0.001)	(0.006)
$Log(ASSETS)_{i,t-1}$	-0.101***	-0.018**	-0.239***	-0.016***	0.001	-0.009
	(0.014)	(0.009)	(0.052)	(0.001)	(0.001)	(0.007)
$CF_{i,t-1}/ASSETS_{i,t-1}$	0.004	0.103***	0.705***	-0.064***	0.013*	0.134**
	(0.041)	(0.023)	(0.143)	(0.011)	(0.007)	(0.057)
$LEVERAGE_{i,t-1}$	-0.180***	-0.381***	-2.346***	-0.037***	-0.142***	-1.008***
	(0.044)	(0.026)	(0.160)	(0.009)	(0.006)	(0.043)
$SEO_{i,t}/ASSETS_{i,t-1}$		-0.091*			-0.082***	
		(0.050)			(0.012)	
$Log(SEO_{i,t})$			-0.006*			-0.001
			(0.004)			(0.001)
N	3,395	3,362	3,186	29,409	27,107	23,792
R-squared	-0.139	0.176	0.096	-0.031	0.061	0.052
Firm FE	Y	Y	Y	Y	Y	Y
SE cluster	Firm	Firm	Firm	Firm	Firm	Firm

Appendix Table A2: Correlation Matrix of Measures of the Hedge Ratio

L is the leverage ratio. Δ is the delta of a European call option on the value of the firm. Equity volatility (σ_E) is calculated as the annualized standard deviation of the firm's daily stock returns in the calendar year preceding the announcement of the QFII program. Sample is restricted to China-listed firms with loans both prior to and after the announcement of the QFII program.

	$(1/L - 1)$	$(1/\Delta - 1)(1/L - 1)$	σ_E
$(1/L - 1)$	1.000		
$(1/\Delta - 1)(1/L - 1)$	0.257	1.000	
σ_E	-0.078	0.099	1.000

Appendix Table A3: Change in Loan Costs and Risk Premia – Hedge Ratio

Dependent variables are changes in value-weighted AISD (Panel A) and TCB (Panel B) of all loans prior to and after the announcement of the QFII program. *DIFCOV* is constructed following Chari and Henry (2004). L is the leverage ratio. Δ is the delta of a European call option on the value of the firm. Equity volatility (σ_E) is calculated as the annualized standard deviation of the firm's daily stock returns in the calendar year leading up to the announcement of the QFII program. Sample is restricted to China-listed firms with loans both prior to and after the announcement of the QFII program. Standard errors are shown in parentheses and clustered by industry. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

	1	2	3	4	5	6
Panel A: Δ AISD						
DIFCOV	-67.83***					
	(13.43)					
DIFCOV * (1/L - 1)		-5.10*			2.19	
		(2.68)			(2.70)	
DIFCOV * h			-41.31			64.98
			(145.43)			(134.94)
DIFCOV * σ				-104.60***	-112.56***	-107.25***
				(27.33)	(29.56)	(28.24)
N	79	79	79	79	79	79
R-squared	0.361	0.178	0.157	0.327	0.331	0.330
Panel B: Δ TCB						
DIFCOV	-55.18***					
	(13.35)					
DIFCOV * (1/L - 1)		-4.94*			0.40	
		(2.51)			(2.91)	
DIFCOV * h			-73.23			7.38
			(138.24)			(132.09)
DIFCOV * σ				-81.03***	-82.50***	-81.33***
				(23.76)	(26.25)	(23.79)
N	79	79	79	79	79	79
R-squared	0.333	0.194	0.172	0.293	0.293	0.293
Firm Controls	Y	Y	Y	Y	Y	Y
Pre Trend	Y	Y	Y	Y	Y	Y

Appendix Table A4: Changes in the Composition of Loans Following the QFII Announcement

Dependent variables are changes in long-maturity (> one year) loans (columns 1 to 3) and term loans (columns 4 to 6) as fractions of total number of loans f prior to and after the announcement of the QFII program. Change in expected return (*ΔE(r)*) is based on the CAPM and calculated from equation (6). Sample is restricted to China-listed firms with loans both prior to and after the announcement of the QFII program. Standard errors are shown in parentheses and clustered by industry. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Dep. Variable:	Δ Long Loan Fraction			Δ Term Loan Fraction		
	1	2	3	4	5	6
ΔE(r)	10.09***	5.55*	4.01***	12.74***	11.81***	4.36**
	(2.51)	(2.81)	(1.24)	(2.42)	(3.38)	(1.70)
M/B		-0.21	0.01		1.16**	-0.65*
		(0.74)	(0.23)		(0.53)	(0.33)
PROFITABILITY		60.74*	23.34***		-97.04	-7.46
		(33.49)	(8.26)		(57.31)	(10.85)
Log(ASSETS)		-5.34*	-3.69***		8.39*	-2.1
		(2.64)	(1.27)		(4.16)	(1.90)
Log(INT. COVERAGE)		3.84	1.46*		1.79	1.57
		(2.78)	(0.77)		(2.78)	(1.10)
P/E		0.01	-0.01*		0.02**	0.01***
		(0.01)	0.00		(0.01)	0.00
LEVERAGE		29.19	-11.99		-6.07	1.86
		(23.64)	(9.58)		(35.13)	(10.97)
SD_OF_PROFITABILITY		-4.42**	-3.89***		4.69	-2.60**
		(2.13)	(1.27)		(4.71)	(0.99)
ALTMAN_Z_SCORE		-2.31*	-1.67***		-0.61	0.00
		(1.31)	(0.40)		(2.65)	(0.61)
PRE_TREND			0.82***			0.97***
			(0.06)			(0.05)
N	56	56	56	46	46	46
R-squared	0.273	0.395	0.857	0.256	0.409	0.926

Appendix Table A5: Additional Summary Statistics
Manufacturing Firms (2000-2001 and 2003-2004)

	N	Mean	SD	Min	Median	Max
COST_DEBT	250045	0.019	0.021	-0.002	0.012	0.089
PUBLIC	250045	0.007	0.084	0.000	0.000	1.000
Log(ASSETS)	250045	10.077	1.466	6.407	9.950	14.189
SOE	250045	0.178	0.383	0.000	0.000	1.000
LEVERAGE	249209	0.646	0.303	0.034	0.641	1.779
SALES_GROWTH	248197	0.407	0.742	-0.929	0.205	3.705
AGE	249866	15.473	13.751	1.000	10.000	58.000
TANGIBILITY	249209	0.332	0.200	0.006	0.303	0.879
Log(INT. COVERAGE)	150882	1.462	1.508	-1.735	1.160	6.229

Appendix Table A6: The Cost of Debt for Non-listed Manufacturing Firms

This table provides the regression result of the QFII effect on the average cost of debt for manufacturing firms. The dependent variable is the average cost of debt calculated as the ratio of interest expenses over total debt in a given year. Data on manufacturing firms are obtained from the Industrial Census Database. The sample contains all Chinese manufacturing firms from 2000 to 2004. We exclude the observations in 2002 and require the sample firms to have observations both before and after 2002. *POST* is a dummy variable that equals one for years 2003 and 2004 and zero otherwise. *PUBLIC* is a dummy variable which equals one if a firm is publicly listed and zero otherwise. All controls are lagged by one period. Robust standard errors are shown in parentheses. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Dep. Variable:	Cost of Debt (bps)		
	1	2	3
PUBLIC * POST	5.47	-1.08	-1.49
	(9.30)	(7.40)	(7.37)
PUBLIC	69.70***	41.82***	
	(6.75)	(7.21)	
POST	-31.71***	-7.29***	-23.54***
	(0.83)	(0.94)	(1.00)
Log(ASSETS)		-0.25	36.18***
		(0.46)	(1.80)
SOE		-71.39***	-3.39
		(2.02)	(3.45)
LEVERAGE		-135.76***	-22.87***
		(2.60)	(4.14)
SALES_GROWTH		30.11***	30.08***
		(0.72)	(0.68)
AGE		-1.02***	-0.15*
		(0.05)	(0.08)
TANGIBILITY		51.92***	11.25**
		(3.34)	(5.31)
Log(INT. COVERAGE)		-60.11***	-54.93***
		(0.35)	(0.57)
N	250,045	150,488	135,047
R-squared	0.007	0.253	0.595
Industry FE		Y	
Province FE		Y	
Firm FE			Y
SE cluster		Firm	Firm

Appendix Table A7: Placebo Tests on Cost of Debt for Manufacturing Firms

The dependent variable is the average cost of debt calculated as the ratio of interest expenses over total debt in a given year. Data on manufacturing firms are obtained from the Industrial Census Database. We use the end of 2004 as our fake event time. The sample contains all Chinese manufacturing firms from 2003 to 2006. *POST* is a dummy variable that equals one for years 2005 and 2006 and zero otherwise. *PUBLIC* is a dummy variable which equals one if a firm is publicly listed and zero otherwise. All controls are lagged by one period. Robust standard errors are shown in parentheses. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Dep. Variable:		Cost of Debt (bps)	
	1	2	3
PUBLIC * POST	20.25**	9.29	11.57*
	(8.80)	(5.99)	(6.06)
PUBLIC	73.79***	30.31***	
	(6.07)	(5.76)	
POST	-3.07***	6.11***	-6.48***
	(0.83)	(0.85)	(0.88)
Log(ASSETS)		2.85***	37.93***
		(0.46)	(2.07)
SOE		-61.20***	6.83
		(2.31)	(4.35)
LEVERAGE		-127.25***	7.97*
		(2.59)	(4.47)
SALES_GROWTH		42.64***	37.06***
		(1.01)	(1.05)
AGE		-0.82***	-0.02
		(0.05)	(0.09)
TANGIBILITY		45.51***	0.63
		(3.43)	(5.80)
Log(INT. COVERAGE)		-54.49***	-48.37***
		(0.35)	(0.57)
N	214,313	124,021	104,759
R-squared	0.002	0.286	0.648
Industry FE		Y	
Province FE		Y	
Firm FE			Y
SE cluster		Firm	Firm

Appendix Table A8: Price Reaction with China Factors

We follow the specifications in columns 1-3 in Table 2 and further add the risk sharing from size and value factors. We use the China factors (LSY3) as in Liu et al. (2019) and construct *DIFCOV(SMB)* as $\text{cov}(\tilde{R}_i, \tilde{R}_{LSY\_SMB}) - \text{cov}(\tilde{R}_i, \tilde{R}_{FF\_SMB\_W})$ and *DIFCOV(HML)* as $\text{cov}(\tilde{R}_i, \tilde{R}_{LSY\_HML}) - \text{cov}(\tilde{R}_i, \tilde{R}_{FF\_HML\_W})$. Robust standard errors are shown in parentheses. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Dep. Variable:	Abnormal Return (%)		
	1	2	3
DIFCOV	0.81***	1.36***	1.31***
	(0.26)	(0.28)	(0.29)
DIFCOV(SMB)	1.15	3.65	3.61
	(2.88)	(2.96)	(3.08)
DIFCOV(HML)	8.62***	7.46***	5.74**
	(2.82)	(2.67)	(2.69)
Log(MARKET_CAP)		4.00***	3.19***
		(0.57)	(0.58)
TURNOVER		-7.26**	-7.76*
		(3.39)	(4.00)
SSE		-1.33**	-1.04*
		(0.58)	(0.60)
PROFITABILITY			1.01
			(1.23)
M/B			-0.01*
			(0.01)
Log(INT. COVERAGE)			-0.29
			(0.23)
P/E			-0.07**
			(0.03)
LEVERAGE			-1.59
			(2.23)
SD_OF_PROFITABILITY			-0.97***
			(0.16)
ALTMAN_Z_SCORE			-0.10
			(0.07)
N	868	868	727
R-squared	0.031	0.098	0.102

Table A9: Changes in Risk Premia and Changes in Loan Costs (1999 – 2007)

The dependent variables are changes in AISD (columns 1 to 3) and TCB (columns 4 to 6), respectively, between the two loans closest to the QFII program's announcement (one pre- and one post-QFII). Change in expected return (*ΔE(r)*) is based on the CAPM and calculated from equation (6). Sample is restricted to China-listed firms with loans both prior to and after the announcement of the QFII program. Standard errors are shown in parentheses and clustered by industry. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Dep. Variable:	Δ AISD			Δ TCB		
	1	2	3	4	5	6
ΔE(r)	-22.27***	-21.31***	-19.51**	-21.27***	-19.95***	-17.52**
	(5.28)	(6.30)	(7.20)	(4.29)	(5.32)	(6.65)
M/B		-2.35	-2.29*		-1.91	-1.82
		(1.46)	(1.31)		(1.22)	(1.15)
PROFITABILITY		6.19	4.59		25.29	23.12
		(65.81)	(70.00)		(64.08)	(67.66)
Log(ASSETS)		1.57	-0.19		0.33	-2.05
		(11.30)	(10.79)		(10.86)	(9.99)
Log(INT. COVERAGE)		10.88*	13.36**		8.07	11.44**
		(5.65)	(5.79)		(5.40)	(5.02)
P/E		-0.03**	-0.02		-0.03*	-0.02
		(0.02)	(0.02)		(0.02)	(0.02)
LEVERAGE		57.91	62.62		46.78	53.15
		(59.05)	(57.79)		(54.78)	(52.91)
SD_OF_PROFITABILITY		1.45	0.76		0.98	0.05
		(6.91)	(6.79)		(6.41)	(6.19)
ALTMAN_Z_SCORE		5.97**	4.95**		5.61**	4.23*
		(2.45)	(2.33)		(2.26)	(2.14)
PRE_TREND			0.31			0.42*
			(0.21)			(0.22)
N	58	58	58	58	58	58
R-squared	0.191	0.308	0.343	0.187	0.286	0.356

Table A10: Loan Cost Response to the QFII Program Announcement (Lender Ownership)

TREAT is a dummy variable that equals one for China-listed firms and zero otherwise. *POST* is a dummy variable that equals one the period after the announcement of the QFII program on 10 June 2002 and zero otherwise. Change in expected return (*ΔE(r)*) is based on the CAPM and calculated from equation (6). Panels A and B's respective dependent variables are AISD and TCB. *DLL*, and *BIG4* are dummies that indicate domestic listed lender and Big 4 Chinese state-owned banks, respectively. All columns include year and firm fixed effects. Standard errors are shown in parentheses and clustered by industry. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Sample:	Term Loans						All Loans					
	1	2	3	4	5	6	7	8	9	10	11	12
Panel A: AISD												
TREAT * POST	-88.77***	-5.97	-48.84**	25.40	-60.27**	-20.09	-84.47**	-39.71	-51.39*	-44.1	-48.87*	-63.6
	(26.05)	(51.12)	(23.04)	(36.50)	(22.73)	(53.34)	(31.86)	(59.49)	(28.32)	(46.67)	(27.11)	(51.77)
ΔE(r) * POST		-13.08***		-14.64***		-14.84***		-9.86***		-8.50**		-7.06*
		(3.70)		(3.56)		(3.17)		(2.56)		(3.67)		(3.54)
TREAT * POST * DLL	2.34	8.57	-9.42	6.96	16.76	42.71	-32.35	-2.68	-39.32	-1.5	-38.18	-2.14
	(30.00)	(35.00)	(36.91)	(44.85)	(29.34)	(36.27)	(34.09)	(39.25)	(35.34)	(50.49)	(35.32)	(53.03)
TREAT * POST * BIG4	14.51	49.26	-2.28	44.89	13.77	70.2	1.84	13.58	-12.59	1.61	-10.16	6.94
	(23.90)	(28.80)	(19.74)	(31.86)	(22.64)	(43.14)	(32.50)	(31.32)	(30.77)	(39.14)	(31.29)	(39.53)
N	225	177	225	177	225	177	251	198	251	198	251	198
R-squared	0.680	0.771	0.734	0.815	0.713	0.819	0.630	0.681	0.683	0.740	0.689	0.750
Panel B: TCB												
TREAT * POST	-92.54***	-8.35	-55.74**	18.9	-63.35***	-23.37	-58.34***	-11.91	-35.22**	-9.75	-32.67**	-25.67
	(27.93)	(47.15)	(24.50)	(37.03)	(21.74)	(53.67)	(18.50)	(32.81)	(15.89)	(26.69)	(14.40)	(30.23)
ΔE(r) * POST		-13.26***		-14.53***		-15.05***		-9.55***		-9.18***		-7.92***
		(3.48)		(3.67)		(2.92)		(1.99)		(3.05)		(2.78)
TREAT * POST * DLL	3.71	10.23	-8.25	8.12	17.59	43.12	-15.89	6.25	-19.13	12.37	-18.2	11.79
	(30.97)	(35.07)	(37.56)	(45.18)	(30.78)	(37.35)	(23.49)	(24.27)	(24.44)	(30.44)	(24.46)	(32.67)
TREAT * POST * BIG4	15.21	45.6	-1.24	42.05	15.94	71	-7.21	2.65	-17.54	-5.72	-15.29	-1.58
	(24.87)	(29.39)	(20.62)	(33.39)	(23.28)	(43.94)	(21.04)	(21.82)	(20.04)	(28.17)	(20.00)	(29.20)
N	225	177	225	177	225	177	251	198	251	198	251	198
R-squared	0.676	0.765	0.728	0.805	0.707	0.809	0.645	0.719	0.698	0.777	0.707	0.789
Controls			Y	Y	Y	Y			Y	Y	Y	Y
Pre Trend					Y	Y					Y	Y

Table A11: Loan Cost Response to the QFII Program Announcement (SOE)

TREAT is a dummy variable that equals one for China-listed firms and zero otherwise. *POST* is a dummy variable that equals one the period after the announcement of the QFII program on 10 June 2002 and zero otherwise. Change in expected return (*ΔE(r)*) is based on the CAPM and calculated from equation (6). Panels A and B's respective dependent variables are AISD and TCB. *SOE* is a dummy that indicates state-owned enterprise. All columns include year and firm fixed effects. Standard errors are shown in parentheses and clustered by industry. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Sample:	Term Loans						All Loans					
	1	2	3	4	5	6	7	8	9	10	11	12
Panel A: AISD												
TREAT * POST	-102.33***	-26.84	-79.92***	-3.92	-77.12**	-33.41	-91.75***	-44.23	-75.42***	-59.25	-77.44***	-88.43
	(26.21)	(71.48)	(26.37)	(39.10)	(35.78)	(49.28)	(28.95)	(64.99)	(22.16)	(40.40)	(24.69)	(57.03)
ΔE(r) * POST		-12.11**		-13.03***		-10.17***		-8.79***		-7.58*		-5.51
		(4.54)		(2.94)		(2.64)		(3.06)		(3.83)		(4.73)
TREAT * POST * SOE	38.05	58.05	29.95	31.4	29.03	31.93	37.82	29.91	26.66	10.63	26.49	6.86
	(30.69)	(34.17)	(33.78)	(48.61)	(33.50)	(46.62)	(27.70)	(46.30)	(31.92)	(63.62)	(31.97)	(69.60)
N	225	177	225	177	225	177	251	198	251	198	251	198
R-squared	0.679	0.774	0.730	0.813	0.735	0.824	0.636	0.692	0.687	0.751	0.690	0.758
Panel B: TCB												
TREAT * POST	-104.21***	-23.94	-83.52***	-3.28	-80.50**	-35.14	-65.46***	-17.51	-55.68***	-22.76	-56.25***	-46.45
	(25.91)	(67.67)	(25.29)	(44.06)	(34.50)	(54.36)	(16.53)	(35.37)	(12.10)	(24.43)	(14.05)	(36.46)
ΔE(r) * POST		-12.76***		-13.55***		-10.44***		-9.24***		-8.93***		-7.16**
		(4.27)		(3.15)		(3.05)		(1.53)		(2.57)		(2.97)
TREAT * POST * SOE	37.47	54.53	30.05	29.88	29.1	30.82	20.69	22.32	14.09	8.18	14.30	5.88
	(30.86)	(35.65)	(33.94)	(50.33)	(33.68)	(48.44)	(15.78)	(29.17)	(19.38)	(42.95)	(19.45)	(47.45)
N	225	177	225	177	225	177	251	198	251	198	251	198
R-squared	0.674	0.768	0.724	0.804	0.730	0.815	0.649	0.729	0.700	0.785	0.705	0.794
Controls			Y	Y	Y	Y			Y	Y	Y	Y
Pre Trend					Y	Y					Y	Y

Table A12: Loan Cost Response to the QFII Program Announcement (Trade Intensive)

TREAT is a dummy variable that equals one for China-listed firms and zero otherwise. *POST* is a dummy variable that equals one the period after the announcement of the QFII program on 10 June 2002 and zero otherwise. Change in expected return (*ΔE(r)*) is based on the CAPM and calculated from equation (6). Panels A and B's respective dependent variables are AISD and TCB. *MI* and *XI* are dummies that indicate import- and export-intensive firms, respectively. All columns include year and firm fixed effects. Standard errors are shown in parentheses and clustered by industry. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Sample:	Term Loans						All Loans					
	1	2	3	4	5	6	7	8	9	10	11	12
Panel A: AISD												
TREAT * POST	-106.95***	-30.17	-85.01***	9.00	-86.44*	-38.18	-104.24***	-57.53	-85.94***	-52.21	-97.78**	-97.17
	(28.42)	(65.62)	(22.89)	(36.76)	(42.24)	(72.08)	(32.05)	(63.86)	(24.28)	(43.02)	(38.91)	(71.15)
ΔE(r) * POST		-11.09***		-15.07***		-10.32**		-8.79***		-10.03**		-6.91
		(3.80)		(3.58)		(4.67)		(2.96)		(3.61)		(4.21)
TREAT * POST * MI	5.81	46.73	10.73	-33.39	40.27	6.60	20.04	61.90	23.55	-19.62	57.16	13.17
	(37.05)	(42.29)	(31.83)	(51.33)	(30.33)	(69.24)	(29.21)	(46.63)	(31.95)	(48.14)	(37.47)	(57.96)
TREAT * POST * XI	-23.53	-55.58*	-18.54	50.26	-41.93	21.91	-11.67	-26.80	-3.96	74.87	-30.43	53.61
	(26.50)	(29.69)	(63.80)	(65.31)	(65.73)	(62.28)	(20.96)	(45.66)	(61.43)	(67.91)	(66.54)	(62.65)
N	225	177	225	177	225	177	251	198	251	198	251	198
R-squared	0.662	0.756	0.715	0.800	0.726	0.815	0.621	0.678	0.672	0.737	0.679	0.747
Panel B: TCB												
TREAT * POST	-110.23***	-31.77	-89.68***	2.80	-91.07**	-45.89	-73.41***	-16.37	-61.04***	-9.13	-68.84***	-41.80
	(25.98)	(59.41)	(20.95)	(40.55)	(40.42)	(77.35)	(18.77)	(41.00)	(10.68)	(23.53)	(24.00)	(45.12)
ΔE(r) * POST		-11.52***		-15.00***		-10.03*				-11.08***		-8.68***
		(3.49)		(3.99)		(5.29)				(2.39)		(2.64)
TREAT * POST * MI	7.13	49.27	9.12	-22.68	40.63	16.89	13.00	20.43	14.91	-40.51	44.26**	-18.81
	(34.11)	(37.72)	(33.83)	(53.01)	(31.44)	(70.59)	(16.76)	(33.22)	(19.28)	(35.16)	(21.31)	(44.24)
TREAT * POST * XI	-24.4	-56.49*	-15.45	39.34	-41.02	10.78	-31.77*	-15.36	-27.89	62.36	-54.6	46.37
	(26.61)	(32.72)	(65.93)	(67.21)	(67.53)	(63.26)	(16.20)	(33.63)	(40.31)	(44.67)	(42.59)	(40.73)
N	225	177	225	177	225	177	251	198	251	198	251	198
R-squared	0.658	0.750	0.708	0.790	0.720	0.805	0.633	0.715	0.684	0.773	0.695	0.784
Controls			Y	Y	Y	Y			Y	Y	Y	Y
Pre Trend					Y	Y					Y	Y

Table A13: Loan Cost Response to the QFII Program Announcement (High-Tech)

TREAT is a dummy variable that equals one for China-listed firms and zero otherwise. *POST* is a dummy variable that equals one the period after the announcement of the QFII program on 10 June 2002 and zero otherwise. Change in expected return (*ΔE(r)*) is based on the CAPM and calculated from equation (6). Panels A and B's respective dependent variables are AISD and TCB. *High-Tech* is a dummy that indicates high-tech firms. All columns include year and firm fixed effects. Standard errors are shown in parentheses and clustered by industry. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Sample:	Term Loans						All Loans					
	1	2	3	4	5	6	7	8	9	10	11	12
Panel A: AISD												
TREAT * POST	-102.71***	-12.70	-87.21***	3.01	-87.89**	-32.56	-98.45***	-39.04	-84.56***	-50.89	-95.15***	-87.13
	(29.64)	(61.70)	(23.73)	(32.26)	(37.71)	(57.28)	(33.32)	(62.31)	(22.98)	(42.08)	(30.24)	(61.73)
ΔE(r) * POST		-12.97***		-13.82***		-10.39***		-9.92***		-9.19**		-6.83
		(3.88)		(3.50)		(3.30)		(2.30)		(3.67)		(4.11)
TREAT * POST * HIGH_TECH	-22.08	60.79*	21.54	207.54*	56.39*	277.48**	5.11	69.17	32.24	185.06**	68.96***	241.97**
	(19.65)	(32.38)	(33.50)	(104.41)	(30.88)	(119.38)	(22.46)	(46.69)	(26.77)	(76.11)	(22.66)	(101.48)
N	225	177	225	177	225	177	251	198	251	198	251	198
R-squared	0.663	0.754	0.715	0.800	0.727	0.815	0.620	0.675	0.672	0.735	0.680	0.744
Panel B: TCB												
TREAT * POST	-105.96***	-13.27	-91.65***	-0.69	-92.41**	-37.60	-71.75***	-10.60	-63.28***	-13.82	-70.55***	-42.76
	(28.72)	(58.69)	(22.49)	(36.57)	(35.96)	(61.66)	(20.04)	(34.81)	(10.78)	(23.42)	(18.04)	(39.82)
ΔE(r) * POST		-13.46***		-14.11***		-10.48***		-10.02***		-10.06***		-8.06**
		(3.57)		(3.68)		(3.71)		(1.89)		(3.04)		(3.11)
TREAT * POST * HIGH_TECH	-19.68	71.87**	19.39	192.09*	57.34*	268.02**	4.6	60.84*	23.17	135.43**	56.15***	186.68**
	(17.18)	(28.92)	(32.58)	(98.51)	(30.87)	(115.90)	(14.54)	(33.97)	(19.55)	(54.48)	(19.68)	(77.69)
N	225	177	225	177	225	177	251	198	251	198	251	198
R-squared	0.658	0.749	0.708	0.790	0.721	0.804	0.632	0.714	0.684	0.772	0.696	0.783
Controls			Y	Y	Y	Y			Y	Y	Y	Y
Pre Trend					Y	Y					Y	Y

Table A14: Domestic Smart Money Response to the QFII Program Announcement

The dependent variable is the change in the percentage of domestic smart money holdings from 2002Q1 to 2002Q2 (i.e., 2002Q2 minus 2002Q1). Change in expected return (*ΔE(r)*) is based on the CAPM and calculated from equation (6). In columns 1 and 2, we include investment funds, state-owned investment entities, and other investment firms as "domestic smart money". In columns 3 and 4, we expand the set to also include investment trusts. In columns 5 and 6, we consider all institutions to be "domestic smart money", except non-investment enterprises, charity funds, consulting firms, state-owned non-investment entities, and individuals who are among the top 10 shareholders in fewer than or equal to two firms. In columns 2, 4, and 6, we include pre-QFII holdings of domestic smart money in the regressions. Robust standard errors are shown in parentheses. ***, **, and * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Dep. Variable:	Δ% domestic smart money holdings (2002Q2 minus 2002Q1)					
	1	2	3	4	5	6
ΔE(r)	0.15*	0.14*	0.15*	0.14*	0.30**	0.25*
	(0.09)	(0.08)	(0.09)	(0.08)	(0.13)	(0.13)
PRE_QFII_HOLDING		-0.04***		-0.04***		-0.08***
		(0.01)		(0.01)		(0.02)
Log(MARKET_CAP)	-0.25	-0.36	-0.24	-0.34	-0.53	-0.39
	(0.27)	(0.27)	(0.27)	(0.27)	(0.67)	(0.65)
TURNOVER	4.19	3.63	4.26	3.83	-2.39	-4.03
	(4.02)	(3.95)	(4.03)	(3.96)	(5.28)	(5.27)
SSE	-0.64	-0.72*	-0.58	-0.65	0.08	-1.04
	(0.41)	(0.43)	(0.41)	(0.43)	(0.85)	(0.89)
M/B	0.07	0.08	0.08	0.09	-0.13	-0.13
	(0.08)	(0.08)	(0.08)	(0.08)	(0.15)	(0.14)
P/E	-0.05	-0.05	-0.05	-0.05	0.06	0.06
	(0.07)	(0.07)	(0.07)	(0.07)	(0.20)	(0.19)
PROFITABILITY	1.30	1.52	1.33	1.61	-3.51	-2.89
	(1.55)	(1.55)	(1.55)	(1.55)	(3.74)	(3.57)
LEVERAGE	-2.05	-1.66	-1.93	-1.62	-1.59	-1.14
	(1.96)	(1.93)	(1.96)	(1.93)	(5.51)	(5.38)
SD_OF_PROFITABILITY	-0.62	-0.73	-0.62	-0.71	-0.32	-0.71
	(0.44)	(0.47)	(0.44)	(0.47)	(0.51)	(0.53)
ALTMAN_Z_SCORE	-0.06	-0.05	-0.05	-0.05	0.12	0.11
	(0.05)	(0.05)	(0.05)	(0.05)	(0.24)	(0.24)
Log(INT. COVERAGE)	-0.12	-0.15	-0.12	-0.15	0.19	0.22

	(0.19)	(0.19)	(0.19)	(0.19)	(0.42)	(0.41)
N	676	676	676	676	676	676
R-squared	0.02	0.04	0.02	0.04	0.02	0.06