Stockholm School of Economics
Master's Thesis in Finance

ADRs:

Why the "Law of One Price" does not hold for US equity issuing ADRs from restricted countries.

The example of Latin America

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Abstract

In this paper we study the market anomaly of price divergence between the ADRs issued from Latin America on the US market and their corresponding domestic securities. Our sample comprises from 107 listed ADRs having one of the Latin American countries as home country. We have found the mean price divergence for different countries ranging from -1 to 1500 basis points. We try to explain this price anomaly with several factors including Abnormal Excess Demand of the ADR, the domestic market's restrictions to Foreign Investment, the stock exchange that the ADR is listed on, the correlation of the ADR with the US market, the liquidity of the ADR and the liquidity of the domestic security. Our analysis shows that the correlation of the ADRs with the US market and the liquidity of the ADRs in the US market are the most powerful explanatory variables for this price divergence.

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1. Introduction

1.1 The Law of one Price

For the last decades a central proposition of the financial science has been the Efficient Market Hypothesis introduced by Fama (1965). According to this hypothesis security prices should always fully reflect all the available information on the market. Further on, basic financial theory postulates that share prices are determined only by the discounted value of future cash flows, Koller et al. (2005). Therefore, the geographic location of issue should not have any impact on the valuation of shares.

A consequence of the Efficient Market Hypothesis is the Law of One Price. The Law states that level stock prices in different countries for a given firm should display a one-to-one correspondence over time. After adjusting for factors such as exchange rates and block size of shares traded, prices of a stock traded on multiple markets should thereby be identical. The intuition behind this is one of the pillars in Fama's Efficient Market Hypothesis and often referred to in financial research.

"According to the law of one price, if markets are efficient, the prices of identical securities that trade in different markets should be similar. The reason for this is that any deviation in their prices will be arbitraged away." (Grossman et al. 2005, p. 2).

Hence, one particular problem appears when securities with the same claim to cash flow but traded on different market places are not traded to the same price over time. Even though this contradicts Fama's framework several empirical findings have recently shown that this type of mispricing occurs every now and then, more on this will be discussed in section 3.

1.2 Purpose and Contribution

We find this violation of the Law of one Price interesting since it is in contradiction with traditional financial theories. Therefore we would like to do further research on cross-listed stocks to try to find more examples where ADRs are traded at a significant premium or discount compared with the local market stock. We would especially like to find further examples of this phenomenon from more recent years compared with previous research on the topic.

Further on, we would like to investigate some reasons that could explain those mispricings. Some explanatory variables that come to our minds are excess demand, choice of stock exchange for the ADR to be listed on, correlation between ADR and US market and liquidity for the ADR and the home counterpart share.

This study is unique due to the specific sample that we analyze which extends the research on this topic. We believe that this may be one of the first papers that studies the full sample of ADRs issued from Latin America on the US market. This thesis strengthens the existing literature on the violation of the Law of one Price. Moreover we hope to give some answers to the question of what drives price anomalies in this market.

Before giving any further theoretical review and introduce previous research we will now present a background of the American ADR market, which is the one that will be in focus in our paper.

2. ADRs – a Background

International diversification is an investment strategy that has been acknowledged since 1974 with the classical paper of Solnick (1974) "Why not diversify Internationally rather than Domestically". Investors that are willing to diversify internationally, traditionally, need to go to a foreign stock exchange. At this approach a lot of obstacles and risks arise. Myriad settlement procedures, high rate of trade failures, unreliable interest and dividend payments, restrictions on foreign investments, foreign withholding taxes, capital controls, differences in accounting rules and reporting requirements and poor information flow. On the other side of the deal are the foreign companies that are looking to expand their investors' base abroad and raise international capital.

In 1927 the first American Depository Receipt or ADR was introduced to address the many difficulties of trading and owning foreign stocks. ADRs are negotiable financial instruments that provide American investors with the opportunity to invest abroad in non-US stocks without going abroad themselves. A depository bank buys and holds the securities in the country of their origin and issues the negotiable certificates called ADRs. Each ADR represents a pre-specified number or fraction of the original security. ADRs can be either sponsored, which means that the company appoints a depository to issue the ADRs and pays for the bank's service, or unsponsored that means that the depositories are issuing the ADRs without any involvement of the company. The difference between a sponsored and an unsponsored ADR is that the former is registered at the Securities and Exchange Commission (SEC) while the latter is not. This results in information asymmetries for the unsponsored ADRs and in full voting rights and better information disclosure from the company for the owners of the sponsored ADRs.

The total value of investments in U.S.-listed depositary receipt programs reached a record of $537 billion at the end of 2004[1]. Currently about 2.100 ADRs are listed in all US stock markets (NYSE, NASDAQ, AMEX) and traded at the OTC markets (i.e.PORTAL)[2].

ADRs offer a wide range of benefits for both investors and companies. Investors are able to diversify internationally as easy as buying domestic stocks by reducing settlement risks and delays. Furthermore, ADRs results in substantial cost reductions as there is no need for double commissions, safe-keeping fees abroad, costs associated with physical transportation of securities and costs associated with cashing dividend checks denominated in foreign currency (Gande, 1997). Since sponsored ADRs are listed in US markets there are subject to the same listing rules and regulations as the other US stocks, which gives an information advantage to the US investors and a better protection against the foreign companies.

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[1] Data taken from the "2004 Annual DR Market Review" of The Bank of New York.

[2] Data taken from the website of The Bank of New York.

3. Past Research – Violations of the Law of One Price

We will here present several examples of empirical findings that highlight violations of the Law of One Price.

Kadiyala and Subrahmanyan (2004) study the divergence of US and local returns in the aftermarket for issuing ADRs between 1991 and 2000. In their paper they choose to divide their data in two groups: "restricted" and "unrestricted". In the first group the local markets do have restrictions on capital inflow while in the latter group the local markets do not have such restrictions. To make this distinction they use the S&P Emerging Markets Handbook which classifies capital markets in countries as being "restricted" or "open". They also use a Euromoney survey that uses a similar classification system. In their data they could not find any significant mispricing for the unrestricted group. However, they do find that the ADRs from the restricted local markets are traded to a significant premium on the US market. In their paper Kadiyala and Subrahmanyan also investigate different variables that could explain the mispricing. Some of the variables that they investigate are: liquidity supply, excess demand, correlation between home and foreign market etc.

Chakrabati (2004) performs a study on ten Indian shares cross-listed in the US. Since almost all cross-listed Indian stocks are ADRs these are in the focal point of his paper. Chakrabati finds out that most Indian ADRs trade at significant premiums or discounts on the NYSE and that these also persist over time.

Sabrahmanyam and Titman (1999) report that stocks issued from foreign companies in US markets experience a higher price in US than in their domestic markets.

Another, perhaps more famous example, is when Rosenthal and Young (1990) showed that the dual stock listings of Royal Dutch and Shell displayed persistent and striking deviations from the levels predicted by the law of one price.

Lamont and Thaler (2003) also shows examples of violations of the law of one price in some cases studied. They also try to explain why those violations can occur. Usually there has to be some kinds of limits to arbitrageurs or at least to risk-free arbitrageurs. One such limitation is short-sale constraints and another one could be capital restrictions.

4. Data

In order to perform our empirical study we need to get cross-listed companies from countries with a certain degree of capital restrictions. Previous research has shown that capital restrictions create limitations to risk free arbitrage, which is a prerequisite for this kind of mispricings to occur, Kadiyala and Subrahmanyan (2004).

Since we want to perform our study on daily prices for the ADRs and their underlying stock we need to choose countries which are in about the same time zone as the U.S in order to avoid problems with non-synchronous trading[3]. If we for instance compared daily closing prices for a stock that were cross-listed on NYSE and Nikkei one could guess that a lot of the price difference observed could be due to time differences between the two stock exchanges.

Given those two prerequisites we have chosen to perform our study on companies with Latin American countries as their home stock exchange and at the same time are listed as ADRs on one of the US stock exchanges. That means NYSE (New York Stock Exchange), NASDAQ (National Association of Securities Dealers Automated Quotations), AMEX (American Stock Exchange) or any of the OTC (Over the Country) markets i.e. PORTAL. By doing so, we will partly solve the problem with non-synchronous trading.

At the same time, most of the countries in South- and Central America have some kind of restrictions on foreign investments. According to the theory this kind of restrictions, which make arbitrageur hard or impossible, are necessary for the mispricings to occur.

Every year the Heritage Foundation is measuring Economic Freedom in the world by its Economic Freedom Index. In this index countries are ranked after different economic

[3] Non-synchronous trading occurs when a stock is listed in two different stock markets that operate in different time zones.

policies like Trade Policy, Fiscal Burden etc. One of the policies that are scored is Foreign Investment. Like the other factors the freedom for Foreign Investments are scored on a scale from one to five, where one means totally open market and five means more or less totally restricted market.

Altogether we are using 107 cross-listed stocks from six countries. The number of ADRs listed in US from Latin America is 268 according to the Database of The Bank of New York. We although managed to find information for only those 107 ADRs. The major reason is that most of the ADRs missing have already been de-listed from the US markets. The time horizon of our sample differs between securities. For some ADRs we have data ranging back to 1991 while for some others we have data only for a couple of years back. The total number of daily observations is 205 498.

We also think that altogether 107 ADRs are a reasonable amount of data to use in this paper considering the scope of a Master Thesis and the time-limitations given thereby. The data are mainly collected through Datastream in combination with the ADR Database of The Bank of New York[4]. The distribution of the ADRs among countries together with their respective Foreign Investment score from 1995 to 2006 is as per Table 1 below.

Table 1: Country distribution of ADRs and Foreign Investment Score per Country.

Country	Number of Stocks	Foreign Investment Ranking											
		2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
Argentina	7	3	3	3	3	2	2	2	2	2	2	2	2
Brazil	46	3	3	3	3	3	3	3	3	3	3	3	3
Chile	20	2	2	2	2	2	2	2	2	2	2	2	2
Mexico	27	3	3	3	3	3	3	2	2	2	2	2	2
Peru	2	3	2	2	2	2	2	2	2	2	2	2	2
Venezuela	5	5	5	5	3	3	3	3	3	3	3	3	3
All	107												

[4] www.bnyadr.com

5. Methodology

5.1 Dependent variable – Daily Price Difference

In this paper we are trying to identify the main reasons why the law of one price is not true for numerous ADRs. Our aim is to do an empirical analysis of differentials between ADRs and their home-market counterpart shares over long horizons of up to fifteen years.

The first step in this study is to calculate the price difference of the ADRs and their local stock which will be our dependant variable in the rest of our analysis. For this reason we use the daily price difference as:

$$\Pr iceDifference_{it} = \frac{(USprice)_{it} - (ADRratio)_i * (localprice)_{it}}{(USprice)_{it}}$$

Both prices are expressed in US dollars. The first step in the empirical analysis is to compute cross-sectional means and medians of this price difference. This should be done for the whole sample, within each country and finally also at a firm specific level.

Our next task is to find variables that can explain the eventual price difference. We will then perform cross-sectional regressions with the daily $PriceDifference_{it}$, as defined above, as dependent and several explanatory variables. But first we need to define the explanatory variables that we later on will test the significance of.

5.2 Explanatory variable one – Abnormal Excess Demand

The first factor we will use is a proxy for *Abnormal Excess Demand* of ADRs in US. To construct this proxy we first need to define a variable for Excess Demand. We hereby follow the methodology of Kadiyala and Subrahmanyan (2004) and create a variable for Excess Demand like:

$$ED_{ADR} = \frac{MV_{ADR}}{MV_{ADR+domestic}}$$

MV_{ADR} is here the market value of the ADR and $MV_{ADR+domestic}$ is the total market value of the foreign equity in the US and domestic market. The intuition behind this variable is that according to the optimal asset allocation strategy a mean-variance investor should hold the foreign security in the proportion that is represented in the world market portfolio which is ($MV_{ADR+domestic}$ / MV_{World}) in order to benefit from the International Diversification. As investors face restrictions in the positions that they can take on the foreign equity, the excess demand is utilized as a measure of this anomaly that may explain the price difference. The higher this number is the smaller the excess demand is in US market. To create our proxy for *Abnormal Excess Demand* we go one step further and define this variable as:

$$EExcessDemand_{ADR} = ED_{ADR,t} - ED_{ADR,AVERAGE(t;t-30)}$$

E Excess Demand or Abnormal Excess Demand is the difference between the *Excess Demand* at time *t* and the average of the *Excess Demand* for the period *t-30* to *t.* The intuition behind this new variable is that if the E Excess Demand variable is negative and significant the Excess Demand among US investor for a single security will create a price premium at the ADR compared with its home counterpart share. If it is positive it means that the Excess Demand today is smaller than the 30 days average, thus this will lower the price premium for the ADR.

5.3 Explanatory variable two – Foreign Investment Ranking

The second explanatory variable is a proxy for restrictions on foreign investments in the ADR's home country. For this purpose we will define the proxy as the ranking for foreign investment restrictions done by the Heritage Foundation, for each country and each year, and defined further in section four. The proxy will therefore take a value from one to five, where five is the hardest restriction on foreign investments and one is the least. In the coming regressions we will name this variable *FIR* (Foreign Investment Ranking).

The intuition is that if the variable will turn out to be significant and positive restrictions on foreign investments in the home country will make the ADR trade at a price premium and therefore the mispricing to be higher.

5.4 Explanatory variable three – Specific Stock Exchange

The third explanatory variable that we use is the specific stock exchange that the ADR is listed on. This will be a factor of information asymmetry and investors' recognition. We create a dummy variable with the name *NY or AMEX* which takes the value of 1 if the stock is listed on NY or AMEX and 0 if the ADR is listed on NASDAQ or at an OTC. We do that because we believe that the ADRs that are listed in NY or AMEX experience higher investors' recognition and thus higher prices (Kadiyala and Subrahmanyan, 2004).

5.5 Explanatory variable four – The US Stock Index

The fourth explanatory variable that we use is the natural log of the S&P 500 index that serves as a benchmark for the US stock market. We name this variable *lnSP500*. The reason for including this variable is that we want to have a variable that in some sense captures the correlation between the ADR and the US stock market. According to the CAPM theory stocks should be priced after their contribution to the market portfolio risk.

With this in mind the reason for including this variable is as follows. If the ADR has less correlation with the US stock market compared with other listed stocks they could be used for diversification among investors. This case for diversification would motivate a higher price on the ADR on the US market compared with its price on their home market. This is also in accordance with the methodology and theory of Kadiyala and Subrahmanyan (2004). If the explanatory variable *lnSP500* is significant and negative the intuition is that a high correlation between the ADR and the US stock market will result in less price divergence and vice versa.

5.6 Explanatory variable five – Market Value of ADR

The fifth explanatory variable is the natural log of the total market value of the ADR in the US stock market. We name this variable *lnMVadr*. The reason for including this variable is that we see this ratio as a measure of liquidity for the ADRs in the US stock market. If the liquidity is high in the US market the ADR should be traded to a premium compared with its share on the home market.

5.7 Explanatory variables six and seven – The Amihud Illiquidity measurement

As our sixth and seventh explanatory variables we will us the Amihud measurements, Amihud (2002). The Amihud measurement is a widely spread variable for illiquidity. To come up with this measurement we collect daily data for the traded volume of the ADRs and the domestic securities and we use them in combination with the prices of the securities to construct the Amihud measures for illiquidity as:

$$Amihud\ Measure_{it} = \frac{\mathrm{Re}\,turn_{it}}{Volume_{it} \times \mathrm{Pr}\,ice_{it}}$$

Where $Return_{it}$ is the daily returns for the securities. $Volume_{it}$ is the daily volume of the securities measured as number of shares traded per day. We calculate this measure for both the ADR and the domestic security. Finally, we compute the 10-, 20- and 30-days moving average for the respective ADR and domestic measures so that we get the explanatory variables *ma10adramihud, ma10homeadramihud, ma20adramihud, ma20homeadramihud, ma30adramihud* and *ma30homeadramihud*. This is done to get smoother variables that take some of the statistic "noise" away.

The intuition behind those measurements is that the higher liquidity in each market the higher should the price on the ADR or home stock be. Consequently, the respective Amihud measurements could therefore have different impact when it comes to the dependent *Price Difference* variable.

5.6 Final regressions

After we have defined the dependent and explanatory variables the next task is to decide on a reasonable set of regressions to test the significance of the explanatory variables. Since we use a cross-sectional data set we find it reasonable also to use cross-sectional regressions to test our hypothesis. We will therefore apply the commonly used pooled OLS (ordinary least square) regression controlling for clusters. Upon that we will also use the OLS regression controlling for Fixed Effects as well as the OLS regression controlling for Random Effects.

Those three regression systems will be performed both for the total sample and on a country specific level. When using regressions in this setup we will start out with running the regressions for the explanatory variables one by one. Finally, the regressions will be used including all the explanatory variables.

6. Hypothesis

Before presenting the results of our study the hypotheses being tested should be formalized.

Hypothesis 0: ADRs issued from Latin American countries have a positive and consistent price divergence in comparison with the corresponding domestic securities.

For this hypothesis we use the *Price Differences*$_{it}$ as defined in the previous section. We use cross-sectional means for the full sample as well as for sub-samples and we test whether the means are significantly different from zero.

Hypothesis 1: ADRs with high Abnormal Excess Demand have a higher price premium.

For this hypothesis we use the explanatory variable *E Excess Demand*$_{ADR}$, as have been presented above, and we regresses it against the price difference. If the beta coefficient of the regression is negative and significant this deduces to the conclusion that positive Abnormal Excess Demand can explain positive price differences and specifically a higher price in US market.

$$\Pr iceDifferences_{it} = \alpha_i + \beta_i \left(EExcessDdemand_{ADR} \right)_t + \varepsilon_i$$

Hypothesis 2: Countries with high Foreign Investment Ranking (FIR) will have a higher price premium in US.

The hypothesis is tested by regressing the variable FIR against the daily ADR price difference as in the following formula:

$$\Pr iceDifferences_{it} = \alpha_{it} + \beta_{it} \left(FIR \right)_{it} + \varepsilon_{it}$$

If the beta coefficient is positive and significant we can say that a higher score, which implies larger restrictions on foreign investments in the home market, will result in a higher price difference. If the beta coefficient is negative, the opposite is true.

Hypothesis 3: The inclusion of the ADR in the NYSE or AMEX gives a positive price premium in comparison to the ADRs listed in NASDAQ or OTC.

We test this variable by regressing the dummy variable for NYSE or AMEX against the daily price difference:

$$\Pr iceDifference_{it} = \alpha_{it} + \beta_i \left(NYorAMEX\right)_i + \varepsilon_{it}$$

If the beta coefficient of this explanatory variable is positive and significant that means that the ADRs that are listed on NYSE or AMEX have a higher price premium than the other ADRs that are listed on NASDAQ or OTC and thus the price difference of the ADRs from the domestic security will be higher.

Hypothesis 4: The higher the correlation of the ADR with the US market, the lower should the price premium for the ADR be.

For this hypothesis we assume as a benchmark for the US market the S&P 500 composite index. We regressing the daily returns of the ADRs with the natural log of the S&P 500 Index.

$$\left(\Pr iceDifference\right)_{it} = \alpha_{it} + \beta_{it} \left(\ln SP500\right)_{it} + \varepsilon_{it}$$

If the beta coefficient in the regression above is negative and significant we conclude that the lower the ADR correlation with the US market is, the higher the price premium for the ADR is and thus, the higher the price difference within the security.

Hypothesis 5: A higher liquidity in the US market for the ADR results in higher price premium for the ADR.

For this hypothesis we first use the natural log of the market value of the ADR as well as the Amihud illiquidity measure as described in the previous section. First, we run the following regression in order to test the hypothesis:

$$\Pr iceDifference_{it} = \alpha_{it} + \beta_{it}\left(\ln MVadr\right)_{it} + \varepsilon_{it}$$

If the beta coefficient is positive and significant we conclude that the higher the liquidity in the US market is, the higher the price premium for the ADR is and thus the higher the price difference is. The opposite is true for negative beta coefficient.

The second type of regressions we run in order to test the hypothesis is:

$$\Pr iceDifference_{it} = \alpha_{it} + \beta_{it}\left(maXXadramihud\right)_{it} + \varepsilon_{it}$$

Here, we vary the moving average period of the Amihud measurement between 10-, 20- and 30 days. If the beta coefficient is positive and significant we conclude that the higher the illiquidity in the US market is, the lower the price premium for the ADR is and thus the lower the price difference is. The opposite is true for a negative beta coefficient.

Hypothesis 6: A high liquidity in the domestic market for the domestic security results in higher price premium for the home security and consequently a lower price difference with the ADR.

For this hypothesis we once more use the Amihud illiquidity measure as described in the previous sections. However, this time the measure for the home market is used. We now run the following regression in order to test this hypothesis:

$$\Pr iceDifference_{it} = \alpha_{it} + \beta_{it}\left(maXX\hom eamihud\right)_{it} + \varepsilon_{it}$$

If the beta coefficient is positive and significant we conclude that the higher the illiquidity in the domestic market is, the lower the price premium for the domestic security is and thus the higher the price difference is. The opposite is true for negative beta coefficient.

Finally we test the above hypotheses all together in order to see the magnitude of their effects when they are tested simultaneously. We utilize the following regressions as below:

$$\begin{aligned} \Pr iceDifference_{it} = {} & \alpha_{it} + \beta_{1it}\left(EExcessDemand_{ADR}\right)_{it} + \beta_{2it}\left(FIR\right)_{it} + \beta_{3i}\left(NYorAMEX\right)_{i} \\ & + \beta_{4it}\left(\ln SP500\right)_{it} + \beta_{5it}\left(\ln MVadr\right)_{it} + \beta_{6it}\left(maXX \hom eamihud\right)_{it} + \varepsilon_{it} \end{aligned}$$

$$\begin{aligned} \Pr iceDifference_{it} = {} & \alpha_{it} + \beta_{1it}\left(EExcessDemand_{ADR}\right)_{it} + \beta_{2it}\left(FIR\right)_{it} + \beta_{3i}\left(NYorAMEX\right)_{i} \\ & + \beta_{4it}\left(\ln SP500\right)_{it} + \beta_{5it}\left(\ln MVadr\right)_{it} + \beta_{6it}\left(maXXadramihud\right)_{it} + \varepsilon_{it} \end{aligned}$$

7. Results

In this section we discuss the results from our model and present the most important tables with the results from the regressions. The tables that are not included in this section can be found in the Appendix. We mainly focus on the results of the two final regressions mentioned in Section 6.

7.1 Country Specific Price Divergence

When we look at the price divergence between the US ADR and the underlying share on the domestic market for each home country we get the data presented in Table 2 below. As one can see the overall mean price divergence is 0.54%. That means that the ADRs are, on average, traded to a 50 basis point premium compared to the home market securities. We can also see that this premium is overall significant at a one percent level. The standard deviation for the whole sample is 0.25.

The results show a clear and significant mispricing for all the countries but Brazil where the p-value is 53%. This result should not change much of the conclusions since the mean mispricing in Brazil is as small as 0.01%. For the rest of the countries we find significant levels of price divergence ranging from -0.01% to 15.58%. Mexico has the lowest mispricing of -0.01% which actually means that the price of the ADR is on average 0.01% lower than the price of the domestic security. But since the price difference of 0.01% is so small we can not draw any clear conclusions from this result. Chile has a mean mispricing of 0.75% with a p-value of 0, which implies a very high significance. Venezuela has on average a mispricing of 1.5% with a p-value of 0 which is also significant. This implies that the ADR is on average 1.5% more expensive than the underlying domestic security. Argentina has a mean mispricing of 2.68% with a p-value of 0. This can be interpreted as that the ADR has a higher price than the home market security on average of 2.7%. Finally, Peru has an average mispricing of 15.6% with a t-statistic of 40, which shows the high significance of this result. We can interpret this result as the ADRs from Peru have, on average, a 16% higher price than the home securities. This is relatively large compared with the other countries but it may be driven by the fact that the sample from Peru contains only 2 ADRs.

Table 2. Statistics for mispricing by country

Country	Daily Observations	Number of Stocks	Mean	Std	t-statistic	p-value
Argentina	15494	7	2.68%	0.4398	10.0718	0.0000
Brazil	78543	46	0.01%	0.2177	0.0813	0.5324
Chile	43837	20	0.75%	0.1185	13.2054	0.0000
Mexico	52358	27	-0.01%	0.2611	-8.3636	0.0000
Peru	4626	2	15.58%	0.2644	40.0785	0.0000
Venezuela	10640	5	1.50%	0.3407	4.5508	0.0000
All	205498	107	0.54%	0.2475	10.0718	0.0000

7.2 Firm Specific Price Divergence

When looking at price divergence between each US ADR and the underlying share on the domestic market for each country we get the data presented in Table X3 in the Appendix.

Out of the 107 countries, only 15 do not trade at a price divergence significant different from zero, at the one percent significance level. Three out of these 15 ADRs trade at a price difference significant at the 5% level. Of the 92 ADRs/stocks that do trade at a significant price divergence, about half of them, 48, trade to a premium on the US market while 43 are traded at a discount in the US market.

The median of the price divergence for each ADR is presented in column three of Table X3. According to the median, 43 ADRs are trading in a premium from the home market security, 5 ADRs trade in the same price as the home market security and 44 ADRs trade in a discount to the home market security. Thus these results do not change much the magnitude of the price divergence for our sample. Therefore we will focus our analysis on the average price divergence in the rest of the paper

7.3 Regressions' results for the full sample

In Tables X4, X5 and X6 in the Appendix we present the results from the regressions for the full sample. We have used three different regression models that are appropriate for panel data and we report all the results. The first model is the pooled OLS regression, the second one is the Fixed Effect model and the last one is the Random Effect model.

As can be seen in Table X4 the results from the pooled OLS regression are not that significant and almost all the explanatory variables are not significant at 5% level.

From the Fixed Effect model we get high statistical significance for almost all the explanatory variables both when running the regressions for the explanatory variables one by one and when running the regressions including all the explanatory variables (this is the bottom regression at the tables). The *Amihud Illiquidity measure* is in most cases not statistically significant. The only drawback with this model is that it drops the dummy variable for the stock exchange, since the model does not accept time-constant variables. As well the independent variable of *Abnormal Excess Demand* is not statistically significant in the overall model and in the individual regression. The overall R-square is as low as 0.74%.

Finally, we run the Random Effect model where the time-constant variables are accepted and we see that the independent variable of the *Stock Exchange* can not explain the existence of price divergence. The dummy variable (NY or AMEX) is not statistically significant in this model. Again *Abnormal Excess Demand* is neither statistically significant. When looking at the individual regressions for *Abnormal Excess Demand*, *Stock Exchange* and the *Amihud measurements* for all lags, we conclude that none of them is statistically significant. In the total model we lack significance only for the *Abnormal Excess Demand* and the *Stock Exchange dummy*. The overall R-square is the same as in the Fixed Effect model at 0.74% level.

7.4 Regressions' Results per Country

7.4.1 Argentina

Argentina has 7 ADRs/stocks in this sample and 15 465 observations. The results of the regressions are reported in Tables X7, X8 and X9 in the Appendix.

Looking at the results from the pooled OLS regression we conclude that most of the explanatory variables can not explain the price divergence. Almost all the explanatory variables, but the *Stock Exchange dummy,* are not statistically significant, both in the individual regressions and in the total regression. We can also see that the *Amihud measurements* for the home market are statistically significant in the individual regressions. The overall R-square for the total model regression is 4.25%.

The Fixed Effect model, as we mentioned before, drops the *Stock Exchange dummy* variable. In the individual regressions almost all the *Amihud measurements*, but for the home market 10 days moving average, are insignificant statistically. The explanatory variable for the *Foreign Investment Ranking* is also not significant as individual explanatory variable. When we look at the total model regression we get high significance for all the explanatory variables but for the intercept and the *Amihud measurement*. The overall R-square is 0.65%.

Finally, the Random Effect model gives us the most significant results. We get significance at the 5% level for all the explanatory variables in the total model regression. The overall R-square is 4.25% for the full sample, which is satisfactory and gives explanatory power to the results of the model. Looking individually at the explanatory variables, we get insignificant results for the *Foreign Investment Ranking* and for four out of six *Amihud measurements*.

7.4.2 Brazil

Brazil has 46 ADRs/stocks and 78 543 observations. The results of the regressions are reported in Tables X10, X11 and X12 in the Appendix. The magnitude of the results is almost the same as in the case of Argentina. Once more, the pooled OLS regression does not give any significant results so that one can draw any solid conclusions on the explanatory power of the model. In this case the only difference is that this model drops the *Foreign Investment Ranking* variable and the *Stock Exchange dummy*.

The Fixed Effect regression also drops the *Foreign Investment Ranking* and the *Stock Exchange dummy* due to the time-constant characteristic.

In the case of the Random Effect model we get significant results. In the total model almost all the explanatory variables are significant but the model this time drops the *intercept* and the *Stock Exchange dummy* due to multicollinearity problems. The overall R-square is now 3.14%.

7.4.3 Chile

Chile has 20 ADRs/stocks and 43 837 observations. The results of the regressions are reported in Tables X13, X14 and X15 in the Appendix. The results for Chile have the same outcome as for Brazil. Pooled OLS regression and Fixed Effect model give insignificant results like the previews case. Random Effect regression gives the best results in significance terms. The only difference is that the *intercept* is dropped and the *Abnormal Excess Demand* is not significant at the 5% level. The overall R-square is 5%.

7.4.4 Mexico

Mexico has 27 ADRs/stocks and 52 358 observations in total. The results of the regressions are reported in Tables X16, X17 and X18 in the Appendix. Again, in this case the results of the three regressions have the same magnitude as in the previews case. The pooled OLS regression does not show great significance except for the two variables *Excess Demand and the Amihud measurement* in the total model.

Fixed Effect drops the *Stock Exchange dummy* but still gives significance for the explanatory variables in the total model regression with an R-square of 1.34%.

Random Effect gives statistical significance at 5% for all the explanatory variables except for the *Stock Exchange dummy* and the *intercept*. The overall R-square is almost 2%. Looking at the individual regressions we get significance for all the variables except for the *Stock Exchange dummy*, which is significant at 10% level, and all *the Amihud measurements* which are not significant individually.

7.4.5 Peru

Peru has only 2 ADRs/stocks and 4 626 observations. For this reason the results should be interpreted with caution. The results are reported in Tables X19, X20 and X21 in the Appendix.

Still, pooled OLS regression is not giving significant results in the total sample regression except for the *Market Value* of the ADR.

Fixed Effect model, as always, drops the *Stock Exchange dummy* and in the total sample regression it gives significance to all the explanatory variables except for the *Abnormal Excess Demand*, which is significant at 10% level. The overall R-square is 10.25%.

Random Effect gives significant results for all the variables both in the individual regressions and in the total sample regression. Only *Foreign Investment Ranking* is not significant as individual explanatory variable and *the natural log of the S&P 500 Index* in the total sample regression. Furthermore, the *dummy for the Stock Exchange* is dropped in this model. The overall R-square is in this case12%, which is due to the small sample.

7.4.6 Venezuela

Venezuela has also a small sample, comprised from 5 ADRs/stocks and 10 640 observations. The results of the regressions are reported in Tables X22, X23 and X24 in the Appendix.

The Pooled OLS regression generates few significant results but more insignificant results for almost all the variables, both in the individual regressions as well as in the total sample regressions.

Fixed Effect model drops the dummy variable and this time does not get significance for the *Abnormal Excess Demand* in the total sample regression. The overall R-square is

0.8%. Looking individually the explanatory variables, except the *Amihud measurements,* are statistically significant.

Random Effect model also drops the dummy variable for the *Stock Exchange* and gives significance for all the variables individually except for the *Amihud measurements*. Looking at the total sample regression, using the *Amihud measure*ment for the Home market with 30 days moving average, we get insignificant results at 5% level for the *intercept*, *the Abnormal Excess Demand* and *the natural log of the S&P 500*. The overall R-square is 3.5%.

8. Analysis

In this section we analyze the results of our regressions and we give an economic interpretation. As already mentioned the results that are more appropriate for our model and present the higher significance for the full sample are the ones from the Random Effect model. Thus we will focus mainly on those results and we will attempt to draw some conclusions based on them.

8.1 Full Sample analysis

When looking at the results from the Random Effect model in Table X6 in the Appendix we can say that the *Foreign Investment Ranking*, the *S&P 500 Index*, the *Market Value of ADR* and *Amihud Illiquidity Measurement* for the home and ADR market with 30 days moving average can in some extent explain the price divergence. Even though the overall R-square is not that high (0.7%), the high significance of the variables let us draw some conclusions.

The *Abnormal Excess Demand* and the *Stock Exchange* are both statistically insignificant. We can therefore not draw any conclusions about our hypotheses based on those variables.

The negative sign in the coefficient for the *Foreign Investment Ranking* implies that the higher the ratio is the lower is the mispricing and thus the ADR will trade at a smaller premium compared to the home market. This is not in line with our Hypothesis 2. The coefficient though is very small in absolute terms (-0.00074). One point increase in this ranking will only cause a decrease in the mispricing by 7.4 basis points.

The coefficient of the *natural log of S&P 500* has a negative sign, which implies that the higher the correlation with the S&P 500 is the lower will the price divergence be. This is in line with our Hypothesis 4, where we believe that a high correlation of the ADR with the US market will result in lower price premium due to limited opportunity for diversification for US investors. The beta coefficient for this variable is -0.017. So, if the *natural log of S&P 500* increases by one percentage point then the price divergence will decrease by 170 basis points.

Looking at the *natural log of the Market Value* for the ADR we have a positive beta coefficient equal to 0.032. This implies that a higher Market Value, and therefore a higher liquidity of the ADR in the US market will cause a higher price divergence and thus a higher price premium for the ADR. This is in line with our Hypothesis 5.

As we see, the *Amihud Illiquidity ratio* for the home market security has a negative beta coefficient, which is not in line with our Hypothesis 6. This is since a higher illiquidity of the home security, i.e. *a higher Amihud Illiquidity ratio*, should decrease the price for the home security and thus increase the price divergence with the ADR.

In the same fashion, looking at the regression that uses only the *Amihud ratio* for the ADR we obtain a positive beta coefficient, which is not in line with our Hypothesis 5. A higher illiquidity of the ADR, i.e. a *higher Amihud Illiquidity ratio,* should result in a lower ADR price and hence in a lower price divergence.

Finally, looking at the *intercept* of the total model regression we see that it is negative and equal to -0.069. This implies that, keeping all other variables constant, there is on average a price divergence of -7%, or that the home security for the full sample is trading on average on a 7% premium from the ADR.

8.2 Analysis per Country

8.2.1 Argentina

Once more, we focus our analysis on the results from the Random Effect model, which are presented in Table X9 in the Appendix. In this case we obtain high significance for all the explanatory variables, which gives strong significance to our model and besides that an overall R-square of 4.25%. This adds more explanatory power to our results.

Starting this analysis with the *intercept* of the regression we see that it is positive and as high as 50%. This implies that, keeping all other variables constant, the ADRs of Argentina are trading on average at a premium of 50% from the home market securities.

We believe that this result is mainly driven by the small size of this sample (7 securities, 15 000 observations) and thus we can not say for sure that it is intuitive.

Further on, *Abnormal Excess Demand* is significant and has a positive beta coefficient, which is in not in line with our Hypothesis 1.

Foreign Investment Ranking has a negative coefficient and is equal to -0.018. This result is not in line with our Hypothesis 2 that states that countries with higher *FIR ratio* should have a higher price divergence.

The *Stock Exchange* dummy variable is statistically significant and has a beta coefficient of -0.1. This implies that the ADRs that are listed in the NASDAQ and OTC markets generate higher price premiums than the ones that are listed in the NYSE or AMEX. This is not in line with our Hypothesis 3. The ADRs that are listed in NYSE or AMEX have a lower price divergence of 10% due to the lower price premium.

Looking at the *natural log of the S&P 500*, the sign of the beta coefficient is in line with our Hypothesis 4. A beta coefficient of -0.065 implies that the higher the correlation is between the ADR and the S&P 500 the lower will the price divergence be. This is since the price premium of the ADR will be lower. One percentage point increase will result in a 6.5% decrease in the price divergence.

The beta coefficient of the *natural log of Market Value* of ADR is 0.011, which implies that the higher the Market Value of the ADR is in the US the higher will the price divergence be. One percentage point increase in the Market Value of the ADR can cause 1.1% increase in the price premium of the ADR. This is in line with out Hypothesis 5.

Finally, the *Amihud illiquidity ratio* for the home market security has a positive beta coefficient, which implies that the higher the illiquidity of the home market security is the higher will the price divergence be. This is in line with our Hypothesis 6.

8.2.2 Brazil

Our analysis still focuses on the results from the Random Effect model which are presented in Table X12 in the Appendix. Looking at the last line of the table we can say that the results are statistically significant in the 1% level. Further on, the R-square is around 3%, which adds validity to the model.

To start with, we see that the *intercept* and the *Stock Exchange dummy* are dropped. This is most probably due to multicollinearity problems.

Abnormal Excess Demand has a positive beta coefficient of 0.36, which is not in line with our Hypothesis 1. *Foreign Investment Ranking* has a negative beta coefficient which is neither in line with our Hypothesis 2.

The *natural log of the S&P 500* has a positive beta coefficient, which is not in line with our Hypothesis 4. This would imply that a higher correlation between the ADR and the US market would result in a higher price premium for the ADR and thus in a higher price divergence, which is not in accordance with the theory.

The beta coefficient of the *natural log of the Market Value* of the ADR is 0.033, which implies that a higher Market Value of the ADR will result in a higher price divergence. One percentage point change in the Market Value will cause a 3.3% change in the price premium of the ADR. This is in line with our Hypothesis 5.

Finally, the 30 days moving average *Amihud ratio* for the home market security has a positive beta coefficient. This is in line with our Hypothesis 6. This coefficient implies that the more illiquidity there is in the home security the higher will the price divergence with the ADR be.

8.2.3 Chile

Looking at the results from the Random Effect model at Table X15 in the Appendix we try to analyze the factors that explain the price divergence of the Chilean ADRs. First, we should notice that the *intercept* is dropped from the regression. This is once more probably due to the multicollinearity problem. The overall R-square of 5% gives an explanatory power to our model, which in combination with the high t-statistics makes it powerful.

The *Abnormal Excess Demand* beta coefficient is not significant with a p-value of 85%. Thus, we can not draw any definite conclusion for the way that this variable explains the price divergence.

Foreign Investment Ranking has a positive and significant coefficient of 0.098, which is in line with our Hypothesis 2 and implies that a higher ratio will cause a higher price divergence. One point change in the ratio will result in a 9.8% change in the price divergence.

The dummy variable for the *Stock Exchange* is statistically significant, positive and equal to 0.067. This is in line with our Hypothesis 3. ADRs that are listed in NYSE or AMEX should have a higher price premium, which should result in a higher price divergence. In this specific case, ADRs from Chile that are listed in NYSE or AMEX have a 6.7% price premium than the ones that are listed in NASDAQ or OTC.

The negative beta coefficient for the *natural log of the S&P 500* implies that a higher correlation between the ADR and the US market will results in a lower price divergence. This is in line with our Hypothesis 4. One percentage point increase in the correlation between the ADR and the US market will cause a 4.6% decrease in the price divergence or 4.6% decrease in the price premium of the ADRs.

The *natural log of the Market Value* of the ADR has a beta coefficient of 0.012, which implies that a higher market value of the ADR will result in a higher price divergence. This is in line with our Hypothesis 5. A one percentage point increase in the *natural log of the Market Value* would result in a 1.2 percent increase in the price divergence.

Finally, the coefficient of the *Amihud Illiquidity ratio* for the home market security is not in line with our Hypothesis 6. The negative sign of this coefficient implies that a higher illiquid home security will have as an effect a lower price divergence with the ADR. This is not in line with theory.

8.2.4 Mexico

By having a first look at the bottom line of the Table X18 in the Appendix we can say that our model has a good explanatory power with an overall R-square of 1.9% and high significance for almost all the variables at a 1% level. The *intercept* is not statistically significant, but it is not so important since it is very small (0.008).

The beta coefficient of the *Abnormal Excess Demand* variable is positive and is as high as 0.65, which is not in line with our Hypothesis 1. The result for the *Foreign Investment Ranking* ratio is not in line with our Hypothesis 2. The negative beta coefficient implies that a higher ratio will cause a lower price divergence.

The beta coefficient for the *Stock Exchange* dummy is significant only at the 10% level. Thus we will not consider this result as very important. Although the sign of the coefficient is in line with our Hypothesis 3, which implies that the ADRs that are listed in the NYSE or AMEX have a price premium equal to 4.2% compared with the ones listed in NASDAQ or OTC.

The beta coefficient for the *natural log of the S&P 500* is negative and equal to -0.012. This is in line with our Hypothesis 4 and it implies that a higher correlation of the ADR with the US market will result in a lower price divergence with the home market security. A one percentage point increase in *the lnSP500* will have as result a 1.2% decrease in the price divergence.

The beta coefficient for the *natural log of the Market Value* is 0.0077 and significant at a 1% level. This is in line with our Hypothesis 5. A one percentage point increase in the natural log of the Market Value would result in 0.77 percent increase in the mispricing.

Finally, the beta coefficient of the *Amihud ratio* for the home market security is negative and that is not in line with our Hypothesis 6.

8.2.5 Peru

Looking at Table X21 in the Appendix and focusing at the bottom line we can say that this particular case has a high explanatory power with an R-square of 12% and with almost all the explanatory variables statistically significant except for the *natural log of S&P 500*. The high explanatory power is probably due to the small sample of just two ADRs.

Again, we observe the dummy variable for the *Stock Exchange* to be dropped from the regression. The *intercept* of this regression is negative and equal to -0.29, which means that if keeping all other variables constant the price divergence between the ADR and the home market security should be equal to 29%.

The beta coefficient for the *Abnormal Excess Demand* is positive and equal to 0.44. This result is not in line with our Hypothesis 1.

The Foreign Investment Ranking ratio has a beta coefficient of -0.09 which is in line with our Hypothesis 2. This result implies that a one point increase in the ratio would result in a 9% decrease in the price divergence between the ADR and the home market security.

The dummy variable for the *Stock Exchange* is dropped. This is probably due to the fact that both of the ADRs in the sample are listed on the same stock exchange. The *natural log of S&P 500* has a coefficient of 0.018 which is not in line with our Hypothesis 4.

The *Market Value proxy* has a beta coefficient of 0.079, which implies that the higher the market value of the ADR is the higher would the price divergence between the ADR and the home market security be. This is in line with our Hypothesis 5. A one percentage point increase in the *natural log of the Market Value* would result in a 7.9 percent increase in the price divergence.

Finally, the *Amihud ratio* for the home market security has a beta coefficient of -58.21 which is not in line with our Hypothesis 6.

8.2.6 Venezuela

We present the results for this country in Table X24 in the Appendix. Looking at the last row of the table we can see that the overall R-square is 3.5% and two out of six explanatory variables are not significant at the 5% level. More specifically, *Abnormal Excess Demand* is significant only at the 10% level. Furthermore, the dummy variable for the *Stock Exchange* is dropped also in this model so it does not have any explanatory power.

The *intercept* is not statistically significant but it is positive and equal to 12%, which means that if keeping all other variables constant the ADR would trade in a 12% premium from the home market security.

The beta coefficient for the *Abnormal Excess Demand* is 0.16, and as we mentioned before significant at the 10% level. This result is not in line with our Hypothesis 1.

The coefficient of the *Foreign Investment Ranking* is negative and equal to -0.045, which is not in line with our Hypothesis 2. The *log of the S&P 500* is not statistically significant so we ignore the result in our analysis.

The *natural log of the Market Value* of the ADR has a beta coefficient of 0.0095, which implies that a higher market value for the ADR will result in a higher price divergence for the ADR due to the higher liquidity. This is in line with our Hypothesis 5.

Finally, the beta coefficient for the *home Amihud ratio* is negative and equal to -3.5. This is not in line with our hypothesis.

8.3 Final Remarks on the Analysis

In this section we conclude the analysis of the results from our tests of the hypotheses and we present a final conclusion. For this reason we present the Table 3 below where we have put together the results for the explanatory variables that we tested and we mark the cases where these variables where actually significant and in line with our hypotheses.

Table 3. Summary of the significance of the explanatory variables

	Abnormal Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	30homeAmihud
Full Sample				♪	♪	
Argentina				♪	♪	♪
Brazil					♪	♪
Chile		♪	♪	♪	♪	
Mexico			♪	♪	♪	
Peru					♪	
Venezuela					♪	

In the above table we can see that two of our variables are significant both in the full sample and in most of the country specific samples. The rest of the explanatory variables show no significance in the full sample. Some of them are though significant in the sub samples. Two of the variables are neither significant in the full sample, nor in any of the sub samples.

Abnormal Excess Demand is not significant at all, which is in contrast with the findings of Kadiyala & Subrahmanyam (2004).

Foreign Investment Ranking shows significance only in the sub sample of Chile. This does not give us the power to conclude on its effect on the price divergence due to the small sample effect. The lack of significance can either be due to the fact that capital restrictions on foreign investments can not explain the price divergence in the case of Latin America or that this index is not the best proxy for capital restrictions.

The dummy for the *Stock Exchange* is not that significant since it is only powerful in two samples out of seven. This also comes in contrast with the findings of Kadiyala & Subrahmanyam (2004).

The *natural log of the S&P 500* is significant since it is powerful in the full sample as well as in three sub samples. This implies that the correlation between the ADRs and the US market can explain some of the price divergence. This comes in hand with the CAPM theory.

The *natural log of the Market Value* of the ADR is the most significant explanatory variable in our model. It is significant in all samples. This result implies that the liquidity of the ADR can explain price premiums on ADRs and thereby the price difference in comparison with its domestic counterpart.

Finally, the *Amihud Illiquidity measurement* for the domestic security has low explanatory power. It is only significant in two sub samples, which does not give us the right to draw any stronger conclusions. Thus the illiquidity of the domestic security can not explain the price divergence of the ADR.

9. Conclusion

The starting point for this thesis was to investigate further violations of the Law of one Price. We have chosen to do so by studying the anomaly of price divergence between the ADRs issued from Latin America on the US market and their domestic securities. O

Our first task was then to find significant divergence in the price between the ADRs and their underlying share in the respective home market. When using a sample of 107 ADRs and all together 205 498 daily price observations we managed to conclude that there were a significant price difference between the ADRs and the stocks trading on the home market. We found this price difference to be on average 0.54 percent in favor of the ADRs. This is in line with our Hypothesis 0.

Further on, we tried to explain this price anomaly with several factors. The factors we tested were Abnormal Excess Demand of the ADR, the domestic market's restrictions to foreign investments, the stock exchange that the ADR is listed on, the correlation between the ADR and the US market, the liquidity of the ADR and the liquidity of the domestic security. In the end our analysis showed us that only two of those factors could explain this price divergence.

According to our findings a low correlation between the ADR and the US market increases the price divergence. There is also support for the fact that the liquidity provided for the ADR on the US market can explain the price difference in favor of the ADR.

All in all, we should face our results with caution since the explanatory power of our model was low in most of the cases.

Finally, we would like to summarize the result of the hypotheses tested. In table 4 below we present this summary.

Hypothesis	Explanation	Significant
H0	*ADRs issued from Latin American countries have a positive and consistent price divergence in comparison with the corresponding domestic securities.*	♪
H1	*ADRs with high Abnormal Excess Demand have a higher price premium.*	
H2	*Countries with high Foreign Investment Ranking (FIR) will have a higher price premium in US.*	
H3	*The inclusion of the ADR in the NYSE or AMEX gives a positive price premium in comparison to the ADRs listed in NASDAQ or OTC.*	
H4	*The higher the correlation of the ADR with the US market, the lower should the price premium for the ADR be.*	♪
H5	*A higher liquidity in the US market for the ADR results in higher price premium for the ADR.*	♪
H6	*A high liquidity in the domestic market for the domestic security results in higher price premium for the home security and consequently a lower price difference with the ADR.*	

10. Appendix

10.1 References

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10.2 Other resources

Datastream

Bank of New York ADR database, www.bnyadr.com

Heritage Foundation Economic Freedom Index 2005, www.heritage.org

10.3 Tables of regressions

Table X1. Correlation between Explanatory variables

	E Excess Demand	FIR	ny_amex	lnsp500	lnmvadr	ma10 AdrAmihud	ma10 HomeAmihud	ma20 AdrAmihud	ma20 HomeAmihud	ma30 AdrAmihud	ma30 HomeAmihud
E Excess Demand	1.0000										
FIR	0.0000	1.0000									
Ny_amex	-0.0151	0.0490	1.0000								
lnsp500	0.0074	0.0392	-0.1456	1.0000							
Lnmvadr	0.0005	0.0840	0.1637	-0.0333	1.0000						
Ma10AdrAmihud	0.0001	0.0012	0.0052	-0.0009	0.0098	1.0000					
Ma10HomeAmihud	0.0004	-0.0006	0.0156	0.0005	0.0117	0.0279	1.0000				
Ma20AdrAmihud	0.0000	0.0018	0.0079	-0.0026	0.0144	0.6774	0.0098	1.0000			
Ma20HomeAmihud	-0.0005	-0.0009	0.0220	0.0004	0.0167	0.0219	0.6995	0.0229	1.0000		
Ma30AdrAmihud	0.0001	0.0022	0.0098	-0.0036	0.0177	0.5720	0.0085	0.7959	0.0130	1.0000	
Ma30HomeAmihud	-0.0003	-0.0012	0.0263	-0.0001	0.0208	0.0103	0.5784	0.0146	0.8210	0.0167	1.0000

Table X2. Statistics for mispricing by country

		Full Sample					
Country	**Numeric Number**	**Daily Observations**	**Number of Stocks**	**Mean**	**Std**	**t-statistic**	**p-value**
Argentina	1	15494	7	2.68%	0.4398	10.0718	0.0000
Brazil	2	78543	44	0.01%	0.2177	0.0813	0.5324
Chile	3	43837	20	0.75%	0.1185	13.2054	0.0000
Mexico	4	52358	27	-0.01%	0.2611	-8.3636	0.0000
Peru	5	4626	2	15.58%	0.2644	40.0785	0.0000
Venezuela	6	10640	5	1.50%	0.3407	4.5508	0.0000
All		205498		0.54%	0.2475	10.0718	0.0000

Table X3. Statistics for mispricing by firm

		Full Sample statistics				
Firmid	Daily Observations	Median	Mean	Standard Deviation	t-statistics	p-value
1001	1285	3.39%	9,53%	0.2038	16.75	0.0000
1006	2050	-15.09%	6.91%	1.0412	3.00	0.0027
1007	1362	2.34%	1.70%	0.0522	12.03	0.0000
1008	2742	-0.28%	-0.33%	0.0747	0.02	0.0000
1012	2244	0.00%	8.06%	0.5471	6.98	0.0000
1015	2718	-0.17%	-0.71%	0.0344	-10.88	0.0000
1016	3093	-0.04%	-0.75%	0.0354	-11.79	0.0000
2001	2631	-7.61%	-7.04%	0.1187	-30.44	0.0000
2002	829	-3.86%	-11.27%	0.1847	-17.56	0.0000
2003	829	-3.55%	-4.65%	0.0980	-13.65	0.0000
2004	829	0.18%	0.19%	0.0092	5.87	0.0000
2005	2102	3.12%	8.03%	0.0901	40.91	0.0000
2006	1121	0.11%	0.26%	0.0177	4.99	0.0000
2007	2685	0.03%	18.22%	0.5333	17.70	0.0000
2008	1754	0.28%	0.31%	0.0133	9.80	0.0000
2009	1032	0.00%	0.00%	0.0142	0.03	0.0365
2010	2687	0.00%	0.07%	0.0222	2.09	0.0000
2011	2685	0.00%	-0.07%	0.0203	-1.90	0.0570
2012	2685	6.21%	9.41%	0.2555	19.08	0.0000
2013	8	-3.31%	-3.25%	0.0221	-4.17	0.0042
2015	116	-6.25%	-6.28%	0.0528	-13.41	0.0000
2016	2140	-0.16%	-1.56%	0.0504	-10.20	0.0000
2017	2139	0.00%	0.02%	0.0185	0.52	0.5993
2018	229	0.15%	0.19%	0.0090	3.93	0.0001
2019	102	-1.15%	-2.03%	0.0485	-4.23	0.0000
2021	625	-8.37%	-14.33%	0.2683	-13.35	0.0000
2022	2417	-0.81%	-0.81%	0.0291	-13.63	0.0000
2023	2679	0.02%	-0.06%	0.0265	-1.52	0.0293
2024	1349	0.19%	0.19%	0.0020	6.82	0.0000
2025	1754	11.90%	10.45%	0.0473	92.53	0.0000
2026	1721	0.14%	0.12%	0.0160	3.15	0.0017
2027	404	0.21%	0.19%	0.0001	3.56	0.0004
2028	2557	-1.03%	-9.60%	0.1982	-24.50	0.0000
2029	2557	-0.48%	-4.83%	0.4488	-5.44	0.0000
2030	1288	0.29%	16.29%	0.3731	15.67	0.0000
2031	1336	0.16%	0.16%	0.0098	5.78	0.0000
2032	2404	0.06%	1.01%	0.0335	14.73	0.0000
2033	1177	0.22%	0.35%	0.0217	5.49	0.0000
2034	2696	-0.06%	0.04%	0.0349	0.63	0.5320
2035	2686	-13.73%	4.30%	0.6676	3.34	0.0008
2037	1755	-0.15%	-0.18%	0.0229	-3.31	0.0009
2038	1755	-27.59%	-23.50%	0.2709	-36.36	0.0000
2040	1755	-0.61%	-0.68%	0.0288	-9.71	0.0000

2042	1755	0.11%	0.17%	0.0171	4.28	0.0000
2043	1755	0.00%	0.03%	0.0194	0.80	0.4239
2044	1901	-2.06%	-2.95%	0.0424	-29.10	0.0000
2045	1133	-6.67%	-6.51%	0.1252	-17.50	0.0000
2046	1755	0.55%	0.58%	0.0227	13.02	0.0000
2048	1537	-0.39%	-0.46%	0.0188	-9.68	0.0000
2049	2910	-0.03%	0.52%	0.1553	1.75	0.0805
2050	956	0.14%	0.19%	0.0098	5.87	0.0000
2051	2880	-0.15%	-3.24%	0.1245	-14.00	0.0000
2052	2696	0.02%	0.04%	0.0174	1.32	0.1871
3001	2160	0.13%	0.31%	0.0239	6.11	0.0000
3002	2763	0.17%	0.20%	0.0209	4.95	0.0000
3004	2129	0.35%	0.53%	0.0161	15.48	0.0000
3005	64	-2.46%	-2.23%	0.0455	-3.92	0.0002
3007	2709	0.01%	1.35%	0.1600	4.38	0.0000
3009	3279	0.20%	0.41%	0.0216	10.89	0.0000
3010	318	0.00%	-0.04%	0.0102	-0.76	0.4463
3011	3661	0.31%	0.52%	0.0219	14.46	0.0000
3013	2815	0.51%	0.74%	0.0186	21.27	0.0000
3014	2815	18.57%	15.21%	0.0828	96.30	0.0000
3015	2820	1.10%	-8.74%	0.3228	-14.16	0.0000
3016	57	-0.51%	-0.18%	0.0291	-0.48	0.6318
3017	2016	0.00%	-0.26%	0.0248	-4.68	0.0000
3018	2016	6.38%	6.19%	0.0909	30.57	0.0000
3020	2742	0.02%	0.37%	0.0262	7.37	0.0000
3021	2107	0.00%	-0.05%	0.0271	-1.01	0.3127
3022	1673	-0.54%	-0.64%	0.0320	-8.20	0.0000
3023	2984	0.22%	0.42%	0.0148	15.39	0.0000
3024	1945	-5.33%	-5.42%	0.2173	-11.01	0.0000
3025	2764	0.00%	0.34%	0.0222	8.02	0.0000
6001	936	-1.19%	-1.07%	0.0526	-6.24	0.0000
6002	1271	-0.76%	-15.70%	1.1973	-4.67	0.0000
6003	1239	-0.02%	-0.07%	0.0099	-2.60	0.0000
6004	51	2.26%	2.88%	0.0267	7.72	0.0000
6007	2343	-0.25%	-4.36%	0.4656	-4.53	0.0000
6008	1579	0.21%	0.38%	0.0082	18.22	0.0000
6009	3029	-0.18%	-0.24%	0.0171	-7.83	0.0000
6011	2227	-2.21%	-12.62%	0.1732	-34.46	0.0000
6013	257	0.00%	0.31%	0.0457	1.08	0.2833
6014	418	0.10%	0.08%	0.0054	3.12	0.0020
6016	1912	0.06%	0.08%	0.0066	5.32	0.0000
6017	2452	-0.24%	-2.88%	0.1321	-10.79	0.0000
6019	1789	-0.22%	-0.17%	0.1075	-0.69	0.4891
6023	999	-0.67%	2.03%	0.1141	5.63	0.0000
6025	705	-17.97%	-15.84%	0.1258	-33.43	0.0000
6026	481	0.15%	-0.04%	0.0260	-0.31	0.7530
6027	3042	6.21%	5.59%	0.1086	28.41	0.0000
6029	3043	0.46%	5.76%	0.5795	4.31	0.0000

6030	3091	-0.69%	-1.53%	0.0776	-10.99	0.0000
6035	3358	-0.12%	3.17%	0.2482	7.39	0.0000
6037	2713	0.34%	-0.02%	0.0595	-2.53	0.0113
6038	2066	0.11%	-0.36%	0.0308	-5.25	0.0000
6039	3650	-5.91%	-4.90%	0.0365	-81.28	0.0000
6040	3614	-0.48%	-0.63%	0.0126	-30.20	0.0000
6042	890	-5.70%	-3.76%	0.0906	-12.38	0.0000
6043	3483	-0.33%	-0.43%	0.0214	-11.77	0.0000
6044	2878	0.27%	6.48%	0.1063	32.70	0.0000
7001	2461	-0.04%	-2.03%	0.0706	-14.26	0.0000
7002	2165	30.05%	35.59%	0.2614	63.35	0.0000
8001	2247	-12.28%	6.31%	0.6216	4.81	0.0000
8002	2246	0.09%	-1.91%	0.0910	-9.99	0.0000
8005	1722	0.00%	0.81%	0.1968	1.72	0.0000
8006	2698	-0.19%	-1.96%	0.2286	-4.46	0.0000
8008	1727	5.88%	5.81%	0.2286	8.91	0.0000
All	205498	-	0.54%	0.2475	10.07	0.0000

In the rest of the Tables we report the results from the regressions including below each intercept the p-values.

Table X4

OLS Regression Panel(Cluster)

Obs.	Firms	Intercept	Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2
202789	107	0.0058369	3.03E-06											0.0000
		0.402	0.274											
205055	107	0.0081844		-0.0005645										0.0028
		0.25		0.401										
205498	107	0.0026989			0.0078378									0.0002
		0.788			0.512									
205498	107	0.0899508				-0.0121675								0.0002
		0.451				0.475								
205498	107	-0.0349093					0.0066508							0.0053
		0.175					0.081							
205489	107	0.0055529						0.0002496						0.0000
		0.418						0.794						
205489	107	0.0057465							0.0055393					0.0001
		0.401							0.253					
205479	107	0.0055497								0.0002381				0.0000
		0.417								0.874				
205479	107	0.006077									0.0128766			0.0004
		0.373									0.148			
205469	107	0.0055617										0.0003109		0.0000
		0.416										0.871		
205469	107	0.0063408											0.0188223	0.0006
		0.352											0.145	
202789	107	0.0308471	2.46E-06	-0.0006307	0.0017653	-0.0094673	0.007015	0.0000625	0.0088049					0.0092
		0.819	0.598	0.356	0.895	0.594	0.07	0.943	0.228					
202789	107	0.0311934	2.47E-06	-0.0006304	0.0015663	-0.0094014	0.006946			-0.0001206	0.0206929			0.0095
		0.817	0.596	0.356	0.906	0.596	0.071			0.93	0.107			
202789	107	0.0316846	2.50E-06	-0.0006303	0.0013961	-0.0093528	0.0068746					-0.0002152	0.0324909	0.0098
		0.814	0.593	0.356	0.917	0.598	0.071					0.9	0.07	
204997	107	0.012653	3.66E-07	-0.0006301	0.0018335	-0.0066656	0.0068213					0.0537025		0.0091
		0.924	0.927	0.356	0.89	0.705	0.077					0.005		
204997	107	0.0107849	3.80E-07	-0.0006316	0.0023981	-0.0065585	0.0069143						-1.541481	0.0102
		0.935	0.921	0.356	0.856	0.709	0.074						0.097	

Table X5

Fixed Effect Regression Panel

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2 within	between	overall
202789	107	0.0058369	3.72E-06											0.0000	0.0000	0.0000
		0	0.635													
205055	107	0.0085742		-0.0006598										0.0030	0.0043	0.0028
		0		0												
205498	107	0.005499			(dropped)									0.0000	0.0027	0.0000
		0														
205498	107	0.103408				-0.0141064								0.0002	0.0040	0.0002
		0				0										
205498	107	-0.1940486					0.0328435							0.0343	0.0000	0.0053
		0					0									
205489	107	0.0055588						0.0002759						0.0000	0.0000	0.0000
		0						0.1								
205489	107	0.0053653							-0.0029097					0.0000	0.0372	0.0001
		0							0.008							
205479	107	0.00556								0.0002837				0.0000	0.0000	0.0000
		0								0.236						
205479	107	0.0053619									-0.0029718			0.0000	0.0371	0.0004
		0									0.06					
205469	107	0.0055862										0.0004194		0.0000	0.0000	0.0000
		0										0.143				
205469	107	0.0053324											-0.0035257	0.0000	0.0369	0.0006
		0											0.072			
202789	107	-0.0411636	-3.28E-07	-0.0007394	(dropped)	-0.0226445	0.0338407	0.0001407	-0.0055675					0.0400	0.0000	0.0070
		0.003	0.966	0		0	0	0.394	0.001							
202789	107	-0.041026	-3.38E-07	-0.0007394	(dropped)	-0.0226611	0.0338368			0.0002055	-0.0061293			0.0399	0.0000	0.0070
		0.003	0.965	0		0	0			0.382	0.008					
202789	107	-0.0409507	-3.40E-07	-0.0007393	(dropped)	-0.0226627	0.0338337					0.000359	-0.0057799	0.0399	0.0000	0.0070
		0.003	0.965	0		0	0					0.202	0.043			
204997	107	-0.0675706	7.00E-07	-0.0007382	(dropped)	-0.0180314	0.0331408					0.0308702		0.0384	0.0001	0.0067
		0	0.927	0		0	0					0				
204997	107	-0.0718025	4.07E-07	-0.000739	(dropped)	-0.0176522	0.0333449						-1.932425	0.0408	0.0000	0.0074
		0	0.958	0		0	0						0			

Table X6

Random Effect Regression Panel

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2 within	R2 between	R2 overall
202789	107	0.0013607	3.50E-06											0.0000	0.0000	0.0000
		0.836	0.648													
205055	107	0.0042019		-0.0006588										0.0030	0.0043	0.0028
		0.52		0												
205498	107	-0.0025501			0.0120109									0.0000	0.0068	0.0002
		0.741			0.407											
205498	107	0.099454				-0.0141302								0.0002	0.0040	0.0002
		0				0										
205498	107	-0.1932184					0.0321163							0.0343	0.0000	0.0053
		0					0									
205489	107	0.0009219						0.0002757						0.0000	0.0000	0.0000
		0.888						0.1								
205489	107	0.0007615							-0.0028558					0.0000	0.0372	0.0001
		0.906							0.009							
205479	107	0.0009294								0.0002833				0.0000	0.0000	0.0000
		0.887								0.236						
205479	107	0.0007669									-0.0028608			0.0000	0.0371	0.0004
		0.905									0.07					
205469	107	0.000957										0.0004183		0.0000	0.0000	0.0000
		0.884										0.143				
205469	107	0.0007473											-0.0033548	0.0000	0.0369	0.0006
		0.907											0.086			
202789	107	-0.0366359	-2.31E-06	-0.0007393	-0.0070941	-0.0224435	0.0330435	0.0001434	-0.0055208					0.0010	0.0000	0.0070
		0.021	0.759	0	0.611	0	0	0.385	0.001							
202789	107	-0.0366161	-2.27E-06	-0.0007393	-0.0070638	-0.0224655	0.033063			0.0002049	-0.0061027			0.0399	0.0000	0.0070
		0.021	0.763	0	0.618	0	0			0.383	0.008					
202789	107	-0.0366968	-2.21E-06	-0.0007393	-0.0070192	-0.0224747	0.0330912					0.0003562	-0.0058117	0.0399	0.0000	0.0070
		0.022	0.769	0	0.627	0	0					0.205	0.042			
204997	107	-0.064873	-1.17E-06	-0.0007381	-0.006537	-0.0178796	0.0324447					0.0314527		0.0384	0.0000	0.0068
		0	0.876	0	0.659	0	0					0				
204997	107	-0.0691497	-1.49E-06	-0.0007389	-0.0059332	-0.0174941	0.0326207						-1.929597	0.0408	0.0000	0.0074
		0	0.842	0	0.682	0	0						0			

Table X7

OLS Regression Panel(Cluster) : ARGENTINA

Obs.	Firms	Intercept	Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2
15465	7	0.0264856	0.9987729											0.0345
		0.153	0.361											
15494	7	-0.001167		0.012169										0.0002
		0.995		0.872										
15494	7	0.0674369			-0.0734875									0.0069
		0.002			0.001									
15494	7	0.2459965				-0.031569								0.0004
		0.657				0.688								
15494	7	0.0066046					0.003216							0.0002
		0.948					0.848							
15485	7	0.0274533						0.002275						0.0000
		0.158						0.439						
15485	7	0.0232381							-0.1556623					0.0015
		0.194							0.034					
15475	7	0.0276773								0.0030967				0.0000
		0.159								0.483				
15475	7	0.0220693									-0.2068936			0.0014
		0.215									0.016			
15465	7	0.0278079										0.0037611		0.0000
		0.162										0.531		
15465	7	0.0214231											-0.2330115	0.0014
		0.231											0.004	
15465	7	0.2758909	0.9971912	-0.0467267	-0.0955965	-0.0191546	0.006505	0.0012309	-0.14481					0.0448
		0.652	0.402	0.648	0.02	0.879	0.77	0.754	0.334					
15465	7	0.2717709	0.9930326	-0.0469613	-0.0959004	-0.0193061	0.0072549			0.0006548	-0.1880537			0.0446
		0.653	0.406	0.647	0.024	0.879	0.763			0.944	0.403			
15465	7	0.270181	0.9901528	-0.0473692	-0.0962975	-0.0194637	0.0077475					0.0000229	-0.2122055	0.0445
		0.652	0.408	0.643	0.027	0.878	0.756					0.999	0.408	
15465	7	0.510406	2.292774	-0.0196104	-0.1079695	-0.0652933	0.01176					0.8442536		0.0432
		0.336	0.08	0.819	0.01	0.516	0.484					0.187		
15465	7	0.505891	2.31865	-0.0184726	-0.1067811	-0.0653925	0.0119684						3.356338	0.0425
		0.338	0.08	0.83	0.01	0.514	0.488						0.667	

Table X8

Fixed Effect Regression Panel: ARGENTINA

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	within	R2 between	overall
15465	7	0.0264863	0.996554											0.0346	0.1109	0.0345
		0	0													
15494	7	0.0498475		-0.0099728										0.0001	0.3444	0.0002
		0.01		0.23												
15494	7	0.0268703			(dropped)									0.0000	0.0014	0.0000
		0														
15494	7	0.5516716				-0.075607								0.0020	0.5914	0.0004
		0				0										
15494	7	-0.5325793					0.0887811							0.0241	0.4090	0.0002
		0					0									
15485	7	0.0271353						0.0010732						0.0000	0.0226	0.0000
		0						0.705								
15485	7	0.0245723							-0.0981822					0.0005	0.3550	0.0015
		0							0.004							
15475	7	0.0270825								0.0008509				0.0000	0.0224	0.0000
		0								0.83						
15475	7	0.0245618									-0.0991877			0.0002	0.3610	0.0014
		0									0.052					
15465	7	0.026977										0.0006259		0.0000	0.0227	0.0000
		0										0.896				
15465	7	0.0248986											-0.0827085	0.0001	0.3624	0.0014
		0											0.192			
15465	7	0.0454368	0.7633969	-0.0582894	(dropped)	-0.0303348	0.0512662	0.0001693	-0.1104188					0.0424	0.4532	0.0107
		0.64	0	0		0.026	0	0.952	0.001							
15465	7	0.05023	0.7661409	-0.0581984	(dropped)	-0.0305513	0.0507118			-0.000454	-0.1030964			0.0420	0.4547	0.0107
		0.605	0	0		0.025	0			0.907	0.04					
15465	7	0.0523302	0.7670019	-0.0583909	(dropped)	-0.03061	0.0505654					-0.000875	-0.0839262	0.0418	0.4561	0.0105
		0.59	0	0		0.025	0					0.852	0.177			
15465	7	0.0867064	2.029792	-0.0497794	(dropped)	-0.0651775	0.0803638					0.5600851		0.0520	0.4502	0.0066
		0.37	0	0		0	0					0.01				
15465	7	0.0827709	2.044661	-0.0491248	(dropped)	-0.0653883	0.080919						1.899725	0.0517	0.4499	0.0065
		0.392	0	0		0	0						0.206			

Table X9

Random Effect Regression Panel: ARGENTINA

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	within	R2 between	overall
15465	7	0.034297	0.996634											0.0346	0.1109	0.0345
		0.053	0													
15494	7	0.0542694		-0.0084683										0.0001	0.3444	0.0002
		0.028		0.306												
15494	7	0.065766			-0.0717645									0.0000	0.7152	0.0069
		0			0											
15494	7	0.5331691				-0.0717283								0.0020	0.5914	0.0004
		0				0										
15494	7	-0.3365298					0.0625377							0.0241	0.4090	0.0002
		0					0									
15485	7	0.0348692						0.0011147						0.0000	0.0226	0.0000
		0.06						0.694								
15485	7	0.0311464							-0.1035385					0.0005	0.3550	0.0015
		0.039							0.003							
15475	7	0.0349039								0.0009325				0.0000	0.0224	0.0000
		0.061								0.814						
15475	7	0.0309968									-0.1108495			0.0002	0.3610	0.0014
		0.04									0.028					
15465	7	0.0348473										0.0007462		0.0000	0.0227	0.0000
		0.061										0.876				
15465	7	0.0312831											-0.1012074	0.0001	0.3624	0.0014
		0.039											0.102			
15465	7	0.2758909	0.9971912	-0.0467267	-0.0955965	-0.0191546	0.006505	0.0012309	-0.14481					0.0383	0.7115	0.0448
		0.004	0	0	0	0.156	0.004	0.653	0							
15465	7	0.2717709	0.9930326	-0.0469613	-0.0959004	-0.0193061	0.0072549			0.0006548	-0.1880537			0.0380	0.7320	0.0446
		0.005	0	0	0	0.153	0.002			0.862	0					
15465	7	0.270181	0.9901528	-0.0473692	-0.0962975	-0.0194637	0.0077475					0.0000229	-0.2122055	0.0379	0.7413	0.0445
		0.005	0	0	0	0.15	0.001					0.996	0			
15465	7	0.510406	2.292774	-0.0196104	-0.1079695	-0.0652933	0.01176					0.8442536		0.0393	0.4181	0.0432
		0	0	0.014	0	0	0					0				
15465	7	0.505891	2.31865	-0.0184726	-0.1067811	-0.0653925	0.0119684						3.356338	0.0388	0.4051	0.0425
		0	0	0.02	0	0	0						0.026			

Table X10

OLS Regression Panel(Cluster) : BRAZIL

Obs.	Firms	Intercept	Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2
78543	46	0.0000666	0.4884684											0.1378
		0.995	0.008											
78543	46	0.0000631		(dropped)										0.0000
		0.995												
78543	46	0.0000631			(dropped)									0.0000
		0.995												
78543	46	-0.2094241				0.0300179								0.0010
		-0.81				0.419								
78543	46	-0.054345					0.0101278							0.0271
		0.123					0.056							
78543	46	0.0025479						0.0293951						0.0115
		0.806						0						
78543	46	0.0023498							0.085681					0.0063
		0.822							0.094					
78543	46	0.0034331								0.0398676				0.0144
		0.736								0				
78543	46	0.0037456									0.1380055			0.0100
		0.713									0.055			
78543	46	0.0040255										0.0468756		0.0164
		0.691										0		
78543	46	0.0048424											0.1791176	0.0130
		0.628											0.033	
78543	46	-0.2835641	0.5116955	(dropped)	(dropped)	0.043137	-0.002515	0.0244163	0.0688005					0.1537
		0.34	0.014			0.297	0.589	0	0.012					
78543	46	-0.2966441	0.5192444	(dropped)	(dropped)	0.0457302	-0.0031216			0.0333756	0.1063356			0.1594
		0.315	0.013			0.266	0.495			0	0.002			
78543	46	-0.3037083	0.523394	(dropped)	(dropped)	0.0471883	-0.0034957					0.0389535	0.1299511	0.1630
		0.302	0.012			0.25	0.442					0	0.001	
78543	46	-0.1752803	0.4406639	(dropped)	(dropped)	0.0179907	0.0093327					0.4898105		0.0392
		0.53	0.016			0.634	0.072					0.063		
78543	46	-0.1718207	0.4556543	(dropped)	(dropped)	0.0174563	0.0093711						2.148973	0.0378
		0.539	0.017			0.646	0.066						0.262	

Table X11

Fixed Effect Regression Panel: BRAZIL

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2 within	R2 between	R2 overall
78543	46	0.0000666	0.4880804											0.1523	0.0005	0.1378
		0.922	0													
78543	46	0.0000631		(dropped)										0.0000	0.0290	0.0000
		0.932														
78543	46	0.0000631			(dropped)									0.0000	0.0290	0.0000
		0.932														
78543	46	-0.3074968				0.044071								0.0022	0.0274	0.0010
		0				0										
78543	46	-0.1858647					0.0346095							0.1070	0.0141	0.0271
		0					0									
78543	46	0.0005504						0.0057641						0.0003	0.2502	0.0115
		0.46						0								
78543	46	0.0001273							0.002403					0.0000	0.2997	0.0063
		0.865							0.557							
78543	46	0.000468								0.00479				0.0001	0.2502	0.0144
		0.533								0.002						
78543	46	0.0000485									-0.0005493			0.0000	0.2991	0.0100
		0.949									0.924					
78543	46	0.000379										0.003737		0.0000	0.2503	0.0164
		0.616										0.052				
78543	46	0.0001319											0.0025771	0.0000	0.2987	0.0130
		0.863											0.715			
78543	46	-0.3693835	0.5046734	(dropped)	(dropped)	0.0541546	-0.0015438	0.0021159	0.0003035					0.1555	0.0084	0.1409
		0	0			0	0.016	0.044	0.936							
78543	46	-0.3697412	0.5046447	(dropped)	(dropped)	0.0541863	-0.001526			0.0026907	-0.0030369			0.1555	0.0089	0.1408
		0	0			0	0.017			0.063	0.568					
78543	46	-0.3698642	0.504674	(dropped)	(dropped)	0.0541926	-0.0015147					0.0039039	-0.0075769	0.1555	0.0068	0.1410
		0	0			0	0.018					0.028	0.245			
78543	46	-0.2834428	0.3539555	(dropped)	(dropped)	0.0149526	0.0334053					0.4285932		0.1162	0.0136	0.0325
		0	0			0	0					0				
78543	46	-0.2807916	0.3685614	(dropped)	(dropped)	0.0144329	0.0335524						0.8940232	0.1135	0.0138	0.0313
		0	0			0	0						0			

Table X12

Random Effect Regression Panel: BRAZIL

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	within	R2 between	overall
78543	46	-0.0068988 0.491	0.4880755 0											0.1523	0.0005	0.1378
78543	46	(dropped)		-0.002159 0.512										0.0000	0.0000	0.0000
78543	46	-0.0064771 0.512			(dropped)									0.0000	0.0000	0.0000
78543	46	-0.3142575 0				0.043963 0								0.0022	0.0274	0.0010
78543	46	-0.1931778 0					0.0342235 0							0.1070	0.0141	0.0271
78543	46	-0.0058758 0.496						0.00601 0						0.0003	0.2502	0.0115
78543	46	-0.0062916 0.45							0.0031417 0.442					0.0000	0.2997	0.0063
78543	46	-0.0059405 0.491								0.0052615 0.001				0.0001	0.2502	0.0144
78543	46	-0.0063457 0.446									0.0009202 0.873			0.0000	0.2991	0.0100
78543	46	-0.0060097 0.486										0.004457 0.02		0.0000	0.2503	0.0164
78543	46	-0.0062531 0.453											0.0047579 0.499	0.0000	0.2987	0.0130
78543	46	(dropped)	0.5029904 0	-0.1253168 0	(dropped)	0.0538327 0	-0.0013768 0.027	0.002332 0.026	0.0008386 0.824					0.1555	0.0053	0.1412
78543	46	(dropped)	0.5029865 0	-0.125431 0	(dropped)	0.0538686 0	-0.0013606 0.029			0.0031013 0.032	-0.0019739 0.71			0.1555	0.0041	0.1413
78543	46	(dropped)	0.5030321 0	-0.1254621 0	(dropped)	0.0538772 0	-0.0013504 0.031					0.0045126 0.011	-0.0060266 0.355	0.1555	0.0018	0.1416
78543	46	(dropped)	0.3548791 0	-0.0975247 0	(dropped)	0.0151037 0	0.0330243 0					0.4293561 0		0.1162	0.0135	0.0326
78543	46	(dropped)	0.3695698 0	-0.0965992 0	(dropped)	0.0145924 0	0.0331469 0						0.8980549 0	0.1135	0.0138	0.0314

Table X13

OLS Regression Panel(Cluster) : CHILE

Obs.	Firms	Intercept	Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2
43837	20	0.0000666 0.995	0.4884684 0.008											0.1378
43837	20	0.0000631 0.995		(dropped)										0.0000
43837	20	0.0000631 0.995			(dropped)									0.0000
43837	20	-0.2094241 0.425				0.0300179 0.419								0.0010
43837	20	-0.054345 0.123					0.0101278 0.056							0.0271
43837	20	0.0025479 0.806						0.0293951 0						0.0115
43837	20	0.0023498 0.822							0.085681 0.094					0.0063
43837	20	0.0034331 0.736								0.0398676 0				0.0144
43837	20	0.0037456 0.713									0.1380055 0.055			0.0100
43837	20	0.0040255 0.691										0.0468756 0		0.0164
43837	20	0.0048424 0.628											0.1791176 0.033	0.0130
43837	20	-0.2835641 0.34	0.5116955 0.014	(dropped) (dropped)	(dropped)	0.043137 0.297	-0.002515 0.589	0.0244163 0	0.0688005 0.012					0.1537
43837	20	-0.2966441 0.315	0.5192444 0.013	(dropped)	(dropped)	0.0457302 0.266	-0.0031216 0.495			0.0333756 0	0.1063356 0.002			0.1594
43837	20	-0.3037083 0.302	0.523394 0.012	(dropped)	(dropped)	0.0471883 0.25	-0.0034957 0.442					0.0389535 0	0.1299511 0.001	0.1630
43837	20	0.2066482 0.132	6.68E-06 0.055	(dropped)	0.0588933 0.063	-0.0374031 0.069	0.0017174 0.715					0.0229947 0.155		0.0486
43837	20	0.2037874 0.143	6.92E-06 0.071	(dropped)	0.0625717 0.051	-0.0377757 0.073	0.0019363 0.683						-4.459634 0.135	0.0667

Table X14

Fixed Effect Regression Panel: CHILE

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2 within	R2 between	R2 overall
43837	20	0.0000666 0.922	0.4880804 0											0.1523	0.0005	0.1378
43837	20	0.0000631 0.932		(dropped)										0.0000	0.0290	0.0000
43837	20	0.0000631 0.932			(dropped)									0.0000	0.0290	0.0000
43837	20	-0.3074968 0				0.044071 0								0.0022	0.0274	0.0010
43837	20	-0.1858647 0					0.0346095 0							0.1070	0.0141	0.0271
43837	20	0.0005504 0.46						0.0057641 0						0.0003	0.2502	0.0115
43837	20	0.0001273 0.865							0.002403 0.557					0.0000	0.2997	0.0063
43837	20	0.000468 0.533								0.00479 0.002				0.0001	0.2502	0.0144
43837	20	0.0000485 0.949									-0.0005493 0.924			0.0000	0.2991	0.0100
43837	20	0.000379 0.616										0.003737 0.052		0.0000	0.2503	0.0164
43837	20	0.0001319 0.863											0.0025771 0.715	0.0000	0.2987	0.0130
43837	20	-0.3693835 0	0.5046734 0	(dropped)	(dropped)	0.0541546 0	-0.0015438 0.016	0.0021159 0.044	0.0003035 0.936					0.1555	0.0084	0.1409
43837	20	-0.3697412 0	0.5046447 0	(dropped)	(dropped)	0.0541863 0	-0.001526 0.017			0.0026907 0.063	-0.0030369 0.568			0.1555	0.0089	0.1408
43837	20	-0.3698642 0	0.504674 0	(dropped)	(dropped)	0.0541926 0	-0.0015147 0.018					0.0039039 0.028	-0.0075769 0.245	0.1555	0.0068	0.1410
43837	20	0.2565197 0	1.08E-06 0.759	(dropped)	(dropped)	-0.0468747 0	0.0115737 0					0.0212783 0		0.0234	0.0009	0.0056
43837	20	0.2469296 0	3.87E-07 0.911	(dropped)	(dropped)	-0.0466975 0	0.0127022 0						-4.71507 0	0.0475	0.0039	0.0146

Table X15

Random Effect Regression Panel: CHILE

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2 within	R2 between	R2 overall
43837	20	0.0044817 0.663	1.88E-06 0.595											0.0000	0.0011	0.0000
43837	20	(dropped)		0.0023276 0.642										0.0000	0.0000	0.0000
43837	20	-0.0313051 0.091			0.0474996 0.025									0.0000	0.2144	0.0362
43837	20	0.3073531 0				-0.0434471 0								0.0131	0.0179	0.0112
43837	20	-0.0614268 0					0.0104276 0							0.0069	0.0042	0.0002
43837	20	0.0047682 0.633						0.000156 0.045						0.0001	0.0536	0.0005
43837	20	0.0045524 0.634							-0.0026201 0.007					0.0002	0.1346	0.0002
43837	20	0.0047789 0.633								0.0001693 0.126				0.0001	0.0538	0.0012
43837	20	0.0045751 0.632									-0.0021023 0.131			0.0001	0.1349	0.0009
43837	20	0.0048885 0.625										0.0003189 0.016		0.0001	0.0540	0.0014
43837	20	0.0046075 0.63											-0.0013712 0.426	0.0000	0.1349	0.0016
43837	20	(dropped)	1.24E-06 0.723	0.1023334 0	0.0658342 0.002	-0.0467446 0	0.0119495 0	0.0001607 0.037	-0.0031794 0.001					0.0223	0.1159	0.0335
43837	20	(dropped)	1.24E-06 0.723	0.1024596 0	0.0657903 0.002	-0.0467633 0	0.0119414 0			0.0001874 0.088	-0.0027927 0.043			0.0222	0.1157	0.0333
43837	20	(dropped)	1.25E-06 0.722	0.102696 0	0.0656811 0.002	-0.0467748 -0.0467748	0.011916 0					0.0003321 0.011	-0.0018052 0.291	0.0222	0.1141	0.0330
43837	20	(dropped)	1.29E-06 0.712	0.1051341 0	0.0636651 0.007	-0.0467755 0	0.0113888 0					0.0213868 0		0.0234	0.1236	0.0356
43837	20	(dropped)	6.51E-07 0.85	0.0989239 0	0.0679735 0.004	-0.0465912 0	0.0125023 0						-4.712957 0	0.0475	0.1054	0.0502

Table X16

OLS Regression Panel(Cluster) : MEXICO

Obs.	Firms	Intercept	Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2
52358	27	-9.66E-03	0.7973841											0.0846
		0.35	0.093											
52358	27	-0.0052003		-0.0005222										0.0085
		0.595		0.443										
52358	27	-0.028643			0.0349443									0.0044
		0.144			0.097									
52358	27	0.1748071				-0.0267654								0.0012
		0.404				0.37								
52358	27	0.0118529					-0.0031198							0.0005
		0.732					0.528							
52358	27	-0.0093873						0.0035227						0.0000
		0.362						0.766						
52358	27	-0.0096857							-0.0052874					0.0000
		0.347							0.243					
52358	27	-0.0092699								0.0062032				0.0000
		0.367								0.811				
52358	27	-0.009714									-0.0063274			0.0000
		0.345									0.423			
52358	27	-0.0090268										0.0117502		0.0001
		0.381										0.768		
52358	27	-0.0097434											-0.0074093	0.0000
		0.346											0.498	
52358	27	0.0839072	0.820188	-4.30E-04	0.0394105	-0.0077771	-0.0083641	0.0166172	-0.0043015					0.1010
		0.694	0.086	-4.30E-04	0.087	0.781	0.12	0.02	0.286					
52358	27	0.0818775	0.8204193	-4.30E-04	0.0404382	-0.0073886	-0.0084587			0.0288206	-0.0034269			0.1011
		0.7	0.086	0.52	0.082	0.792	0.113			0.103	0.565			
52358	27	0.0801633	0.8205639	-4.30E-04	0.0415692	-0.0070401	-0.0085628					0.042227	-0.0033289	0.1014
		0.706	0.086	0.519	0.077	0.801	0.106					0.133	0.73	
52358	27	0.0811369	0.731413	-0.0005399	0.0378651	-0.0139251	-0.0016103					0.1047847		0.0203
		0.741	0.029	0.417	0.102	0.65	0.782					0.393		
52358	27	0.0788962	0.7038156	-0.0005395	0.0389164	-0.0134287	-0.0018651						-1.745718	0.0230
		0.747	0.022	0.418	0.093	0.661	0.754						0.026	

Table X17

Fixed Effect Regression Panel: MEXICO

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2 within	R2 between	R2 overall
52358	27	-0.009656	8.00E-01											0.0883	0.0209	0.0846
		0	0													
52358	27	-0.004088		-0.000656										0.0102	0.0061	0.0085
		0		0												
52358	27	-0.0095417			(dropped)									0.0000	0.0001	0.0000
		0														
52358	27	0.1252473				-0.0195699								0.0006	0.0130	0.0012
		0				0										
52358	27	-0.0629002					0.0077808							0.0004	0.0321	0.0005
		0					0									
52358	27	-0.0094829						0.0013414						0.0000	0.0316	0.0000
		0						0.743								
52358	27	-0.0096789							-0.0050375					0.0000	0.0021	0.0000
		0							0.147							
52358	27	-0.0094313								0.002519				0.0000	0.0314	0.0000
		0								0.669						
52358	27	-0.0097008									-0.0058447			0.0000	0.0021	0.0000
		0									0.239					
52358	27	-0.0091622										0.008661		0.0000	0.0311	0.0001
		0										0.239				
52358	27	-0.0097251											-0.0067347	0.0000	0.0020	0.0000
		0											0.272			
52358	27	0.5252304	0.9809887	-0.0004265	(dropped)	-0.0212994	-0.0560745	0.0055365	-0.0044134					0.1125	0.0328	0.0546
		0	0	0		0	0	0.151	0.178							
52358	27	0.5246195	0.9807709	-0.0004266	(dropped)	-0.0212576	-0.0560309			0.0047544	-0.0040773			0.1125	0.0328	0.0546
		0	0	0		0	0			0.393	0.383					
52358	27	0.5249068	0.9807083	-0.0004267	(dropped)	-0.0212682	-0.0560377					0.0085245	-0.0039807	0.1125	0.0330	0.0546
		0	0	0		0	0					0.219	0.492			
52358	27	0.0273899	0.7233134	-0.0006849	(dropped)	-0.0133707	0.0088643					0.1017065		0.0178	0.0062	0.0111
		0.347	0	0		0	0					0.251				
52358	27	0.024976	0.6937887	-0.0006838	(dropped)	-0.0127773	0.0086208						-1.82937	0.0208	0.0104	0.0134
		0.39	0	0		0	0						0			

Table X18

Random Effect Regression Panel: MEXICO

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2 within	R2 between	R2 overall
52358	27	-0.0148123	7.99E-01											0.0883	0.0209	0.0846
		0.169	0													
52358	27	-0.0077217		-0.0006536										0.0102	0.0061	0.0085
		0.477		0												
52358	27	-0.0306007			0.0355088									0.0000	0.0973	0.0044
		0.028			0.087											
52358	27	0.1218539				-0.019636								0.0006	0.0130	0.0012
		0				0										
52358	27	-0.0621619					0.00683							0.0004	0.0321	0.0005
		0					0									
52358	27	-0.0144802						0.0014767						0.0000	0.0316	0.0000
		0.176						0.718								
52358	27	-0.0146521							-0.0050231					0.0000	0.0021	0.0000
		0.178							0.148							
52358	27	-0.0144253								0.0027949				0.0000	0.0314	0.0000
		0.178								0.635						
52358	27	-0.014671									-0.0058154			0.0000	0.0021	0.0000
		0.177									0.241					
52358	27	-0.0141643										0.0090593		0.0000	0.0311	0.0001
		0.186										0.217				
52358	27	-0.0146918											-0.0066898	0.0000	0.0020	0.0000
		0.176											0.275			
52358	27	0.4682086	9.66E-01	-0.0004329	0.0482813	-0.0200416	-0.0517717	0.0055236	-0.0043806					0.1124	0.0650	0.0625
		0	0	0	0.027	0	0	0.152	0.181							
52358	27	0.4677012	9.66E-01	-0.000433	0.04825	-0.0200037	-0.0517357			0.0050926	-0.0039484			0.1124	0.0650	0.0625
		0	0	0	0.027	0	0			0.36	0.399					
52358	27	0.4679229	9.66E-01	-0.000433	0.0484931	-0.0200161	-0.0517457					0.0091604	-0.00374	0.1124	0.0655	0.0626
		0	0	0	0.026	-0.0200161	0					0.186	0.518			
52358	27	0.0116023	0.7253346	-0.0006822	0.0412831	-0.0135656	0.0080795					0.1030389		0.0178	0.0388	0.0165
		0.724	0	0	0.067	0	0					0.244				
52358	27	0.0089242	0.6959845	-0.0006809	0.0423915	-0.0129861	0.0077867						-1.82802	0.0208	0.0348	0.0192
		0.784	0	0	0.052	0	0						0			

Table X19

OLS Regression Panel(Cluster) : PERU

Obs.	Firms	Intercept	Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2
4626	2	0.1554526	0.3911122											0.0266
		0.559	0.042											
4626	2	0.2340664		-0.0388257										0.0003
		0.568		0.585										
4626	2	0.1557939			(dropped)									0.0000
		0.558												
4626	2	-0.5564214				0.1026532								0.0091
		0.335				0.394								
4626	2	-0.3437245					0.0789788							0.0565
		0.344					0.033							
4626	2	0.1530689						-3.48873						0.0094
		0.562						0.443						
4626	2	0.1555609							-0.3593422					0.0015
		0.559							0.271					
4626	2	0.1506739								-6.70929				0.0179
		0.564								0.438				
4626	2	0.1554009									-0.5905344			0.0021
		0.559									0.256			
4626	2	0.1478853										-10.58865		0.0303
		0.565										0.401		
4626	2	0.15539											-0.5972648	0.0014
		0.559											0.372	
4626	2	-0.8407264	-0.5823791	-0.1164659	(dropped)	0.0397102	0.1507829	-3.063903	-0.398476					0.0826
		0.357	0.434	-0.1164659	(dropped)	0.725	0.245	0.486	0.23					
4626	2	-0.7845555	-0.5449895	-0.1186606	(dropped)	0.0368471	0.1454119			-5.681824	-0.5584212			0.0883
		0.389	0.475	0.55		0.739	0.269			0.5	0.244			
4626	2	-0.7308734	-0.5043758	-0.1168027	(dropped)	0.0331484	0.1399985					-9.100631	-0.513846	0.0970
		0.418	0.519	0.558		0.758	0.294					0.459	0.32	
4626	2	-0.3191298	0.2879644	-0.1411837	(dropped)	0.0384806	0.0778137					19.16178		0.0628
		0.085	0.679	0.399		0.584	0.008					0.258		
4626	2	-0.2977219	0.446449	-0.0975115	(dropped)	0.0187551	0.0797098						-58.21692	0.1207
		0.226	0.581	0.618		0.771	0.004						0.176	

Table X20

Fixed Effect Regression Panel: PERU

														R2		
Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	within	between	overall
4626	2	1.55E-01	0.3872504											0.0526	1.0000	0.0266
		0	0													
4626	2	0.2587364		-0.0510628										0.0012	1.0000	0.0003
		0		0.019												
4626	2	0.1557939			(dropped)									0.0000	1.0000	0.0000
		0														
4626	2	0.2385713				-0.0119309								0.0002	1.0000	0.0091
		0.002				0.29										
4626	2	-0.1842229					0.05376							0.0522	1.0000	0.0565
		0					0									
4626	2	0.1558955						0.1300183						0.0000	1.0000	0.0094
		0						0.73								
4626	2	0.1556563							-0.212143					0.0010	1.0000	0.0015
		0							0.028							
4626	2	0.1561161								0.4221471				0.0001	1.0000	0.0179
		0								0.426						
4626	2	0.1555978									-0.2946405			0.0010	1.0000	0.0021
		0									0.029					
4626	2	0.1558004										0.0087211		0.0000	1.0000	0.0303
		0										0.989				
4626	2	0.155696											-0.1447105	0.0002	1.0000	0.0014
		0											0.38			
4626	2	0.6236556	0.2455672	-0.0972234	(dropped)	-0.0681778	0.0317619	0.1662065	-0.297287					0.0693	1.0000	0.0357
		0	0	0		0	0	0.648	0.001							
4626	2	0.6236111	0.2463328	-0.0971775	(dropped)	-0.0679904	0.0315729			0.4700247	-0.4035591			0.0693	1.0000	0.0343
		0	0	0		0	0			0.359	0.002					
4626	2	0.6238317	0.2470919	-0.0978826	(dropped)	-0.0676322	0.0313216					-0.0208064	-0.2939596	0.0679	1.0000	0.0360
		0	0	0		0	0					0.974	0.066			
4626	2	0.3994656	0.1098213	-0.0985193	(dropped)	-0.0621569	0.061034					1.178411		0.0636	1.0000	0.0501
		0	0.247	0		0	0					0.835				
4626	2	0.391519	0.1806254	-0.086628	(dropped)	-0.066972	0.0626564						-26.95145	0.0881	1.0000	0.1025
		0	0.054	0		0	0						0			

Table X21

Random Effect Regression Panel: PERU

														R2		
Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	within	between	overall
4626	2	1.55E-01	0.3911122											0.0526	1.0000	0.0266
		0	0													
4626	2	0.2340664		-0.0388257										0.0012	1.0000	0.0003
		0		0.21												
4626	2	0.1678294			(dropped)									0.0000	0.0000	0.0000
		0.372														
4626	2	-0.5564214				0.1026532								0.0002	1.0000	0.0091
		0				0										
4626	2	-0.3437245					0.0789788							0.0522	1.0000	0.0565
		0					0									
4626	2	0.1530689						-3.48873						0.0000	1.0000	0.0094
		0						0								
4626	2	0.1555609							-0.3593422					0.0010	1.0000	0.0015
		0							0.009							
4626	2	0.1506739								-6.70929				0.0001	1.0000	0.0179
		0								0						
4626	2	0.1554009									-0.5905344			0.0010	1.0000	0.0021
		0									0.002					
4626	2	0.1478853										-10.58865		0.0000	1.0000	0.0303
		0										0				
4626	2	0.15539											-0.5972648	0.0002	1.0000	0.0014
		0											0.011			
4626	2	-0.8407264	-0.5823791	-1.16E-01	(dropped)	0.0397102	0.1507829	-3.063903	-0.398476					0.0315	1.0000	0.0826
		0	0	0		0.013	0	0	0.002							
4626	2	-0.7845555	-0.5449895	-1.19E-01	(dropped)	0.0368471	0.1454119			-5.681824	-0.5584212			0.0288	1.0000	0.0883
		0	0	0		0.021	0			0	0.002					
4626	2	-0.7308734	-0.5043758	-1.17E-01	(dropped)	0.0331484	0.1399985					-9.100631	-0.513846	0.0272	1.0000	0.0970
		0	0	0		0.0331484	0					0	0.021			
4626	2	-0.3191298	0.2879644	-0.1411837	(dropped)	0.0384806	0.0778137					19.16178		0.0508	1.0000	0.0628
		0.007	0.033	0		0.017	0					0.017				
4626	2	-0.2977219	0.446449	-0.0975115	(dropped)	0.0187551	0.0797098						-58.21692	0.0747	1.0000	0.1207
		0.009	0.001	0.001		0.23	0						0			

Table X22

OLS Regression Panel(Cluster) : VENEZUELA

Obs.	Firms	Intercept	Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2
7960	5	0.0273426	1.154408											0.0537
		0.255	0.306											
10197	5	0.1542504		-0.0381721										0.0085
		0.357		0.384										
10640	5	0.0150325			(dropped)									0.0000
		0.468												
10640	5	0.2375024				-0.0317587								0.0004
		0.904				0.91								
10640	5	-0.0468149					0.0120882							0.0034
		0.407					0.423							
10640	5	0.0154541						0.0116363						0.0003
		0.459						0.015						
10640	5	0.0155335							0.0015598					0.0001
		0.463							0.466					
10640	5	0.0155811								0.0151424				0.0002
		0.458								0.053				
10640	5	0.0167218									0.0052586			0.0003
		0.431									0.223			
10640	5	0.0157313										0.019289		0.0003
		0.456										0.082		
10640	5	0.0173331											0.0071615	0.0005
		0.421											0.235	
7960	5	3.041735	1.340858	-0.0174597	(dropped)	-0.4279979	0.0099154	0.0084907	-0.0339239					0.0917
		0.405	0.158	-0.0174597		0.418	0.751	0.121	0.162					
7960	5	3.03896	1.341302	-0.0174176	(dropped)	-0.4277641	0.0101126			0.0131013	-0.03429			0.0917
		0.405	0.158	0.45		0.418	0.749			0.221	0.494			
7960	5	3.032456	1.340912	-0.0173913	(dropped)	-0.4270262	0.0103463					0.0178535	-0.0360206	0.0917
		0.406	0.158	0.45		0.418	0.743					0.248	0.514	
10168	5	0.0852533	0.2304584	-0.0395001	(dropped)	0.0060045	0.0059508					0.0818297		0.0107
		0.966	0.863	0.324		0.983	0.808					0.197		
10168	5	0.1282002	0.1623231	-0.045499	(dropped)	-0.0005436	0.009534						-3.501619	0.0346
		0.948	0.899	0.257		0.998	0.698						0.055	

Table X23

Fixed Effect Regression Panel: VENEZUELA

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2 within	R2 between	R2 overall
7960	5	2.73E-02	1.155714											0.0543	0.0633	0.0537
		0	0													
10197	5	0.1712119		-0.043106										0.0102	0.0693	0.0085
		0		0												
10640	5	0.0150325			(dropped)									0.0000	0.0372	0.0000
		0														
10640	5	0.4681327				-0.0646823								0.0014	0.2872	0.0004
		0				0										
10640	5	-0.4864808					0.0980214							0.0242	0.0000	0.0034
		0					0									
10640	5	0.0154252						0.0108392						0.0002	0.0197	0.0003
		0						0.117								
10640	5	0.0142272							-0.0025068					0.0001	0.2800	0.0001
		0							0.228							
10640	5	0.0155307								0.0137529				0.0002	0.0197	0.0002
		0								0.16						
10640	5	0.014257									-0.0024139			0.0001	0.2800	0.0003
		0									0.422					
10640	5	0.0156675										0.0175263		0.0002	0.0197	0.0003
		0										0.148				
10640	5	0.0137409											-0.0040206	0.0001	0.2799	0.0005
		0											0.282			
7960	5	1.597686	1.107743	-0.0156157	(dropped)	-0.3974374	0.2175394	0.0036899	-0.037281					0.1580	0.6193	0.0259
		0	0	0.001		0	0	0.594	0.122							
7960	5	1.599105	1.108428	-0.0156246	(dropped)	-0.397432	0.2173629			0.0071034	-0.0247375			0.1578	0.6246	0.0259
		0	0	0.001		0	0			0.467	0.455					
7960	5	1.598291	1.10855	-0.0156336	(dropped)	-0.3973098	0.2173538					0.0095205	-0.0307436	0.1579	0.6326	0.0259
		0	0	0.001		0	0					0.432	0.446			
10168	5	-0.7495975	0.0745608	-0.0392316	(dropped)	0.0655026	0.0854723					0.0644077		0.0264	0.1264	0.0014
		0	0.382	0		0	0					0.031				
10168	5	-0.7160786	-0.000207	-0.0452435	(dropped)	0.0595309	0.0900826						-3.568463	0.0515	0.1287	0.0085
		0	0.998	0		0.001	0						0			

Table X24

Random Effect Regression Panel: VENEZUELA

Obs.	Firms	Intercept	E Excess Demand	FIR	NY or AMEX	lnSP500	lnMVadr	ma10adramihud	ma10adrhome	ma20adramihud	ma20homeamihud	ma30adramihud	ma30homeamihud	R2 within	R2 between	R2 overall
7960	5	2.83E-02	1.155685											0.0543	0.0633	0.0537
		0.043	0													
10197	5	0.1721736		-0.0429174										0.0102	0.0693	0.0085
		0		0												
10640	5	0.0179978			(dropped)									0.0000	0.0000	0.0000
		0.319														
10640	5	0.4638456				-0.0635692								0.0014	0.2872	0.0004
		0				0										
10640	5	-0.4219987					0.0833251							0.0242	0.0000	0.0034
		0					0									
10640	5	0.0185031						0.0108792						0.0002	0.0197	0.0003
		0.371						0.115								
10640	5	0.0173724							-0.0023733					0.0001	0.2800	0.0001
		0.327							0.253							
10640	5	0.0186339								0.0138279				0.0002	0.0197	0.0002
		0.367								0.157						
10640	5	0.0174344									-0.0021361			0.0001	0.2800	0.0003
		0.325									0.476					
10640	5	0.0188027										0.0176315		0.0002	0.0197	0.0003
		0.363										0.145				
10640	5	0.0170571											-0.0035774	0.0001	0.2799	0.0005
		0.336											0.336			
7960	5	3.041735	1.340858	-1.75E-02	(dropped)	-0.4279979	0.0099154	0.0084907	-0.0339239					0.0996	0.0059	0.0917
		0	0	0		0	0.012	0.233	0.171							
7960	5	3.03896	1.341302	-1.74E-02	(dropped)	-0.4277641	0.0101126			0.0131013	-0.03429			0.0996	0.0013	0.0917
		0	0	0		0	0.01			0.188	0.304					
7960	5	3.032456	1.340912	-1.74E-02	(dropped)	-0.4270262	0.0103463					0.0178535	-0.0360206	0.0998	0.0000	0.0917
		0	0	0		-0.4270262	0.009					0.143	0.349			
10168	5	0.0852533	0.2304584	-0.0395001	(dropped)	0.0060045	0.0059508					0.0818297		0.0140	0.8347	0.0107
		0.454	0.007	0		0.717	0.008					0.006				
10168	5	0.1282002	0.1623231	-0.045499	(dropped)	-0.0005436	0.009534						-3.501619	0.0386	0.6024	0.0346
		0.255	0.052	0		0.974	0						0			