Diversification and Market Risk Exposures of Single-Listed versus Dual-Listed ADRs

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Abstract

We examine the market risk exposure and diversification value of single-listed ADRs and dual-listed ADRs during the 2004-2012 period. We find that both types of ADRs provide no diversification value, but are directly exposed to U.S. market risk. Finally, we find that portfolios of single and dual-listed ADRs behave significantly different than their home market.

1. Introduction

There are two broad categories of American Depositary Receipts (ADRs), dual-listed and single-listed. Companies which issue dual-listed ADRs have their shares listed on their home market and ADRs shares listed in U.S. exchanges. On the other hand, firms whose underlying share is not listed in their home market may issue a single-listed ADR in the U.S. Single-listed ADRs are quoted and traded daily in U.S. exchanges and represent claims to cash flows generated in foreign countries by foreign corporations (or subsidiaries of foreign corporations) that raise capital in the U.S. From the U.S. investor's perspective, single-listed ADRs represent a riskier investment vehicle than a similar dual-listed counterpart. As single-listed ADRs are traded only in their host market, cancellation of the ADR program (or if the investor decides to renders their ADRs shares) will not result in the delivery of locally listed ordinary shares, but rather in illiquid unlisted shares.

Although the issuance of single-listed ADRs is not a recent phenomenon, only a handful of academic papers examine them. Some papers acknowledge the existence of these securities but exclude them from their analysis, for example, Brockman and Hao (2011). Bae and Wang (2012) includes 13 single single-listed ADRs in their study. They examine the effect on firm valuation of having the word "China" included in the company name of Chinese stocks listed on U.S. exchanges. They find that after controlling for risk and liquidity China-named firms outperform non-China-named firms. Luo, Fang, and Esqueda (2012) examine and compare the aftermarket performance of single-listed and dual-listed Chinese ADRs. Their sample includes 73 ADRs, 59 single-listed and 14 cross-listed. The authors report that dual-listed ADRs outperform their single-listed. They attribute the difference to more stringent listing requirements and accounting standards. Finally, He and Yang (2012) examine the issue of which market, the U.S. or China, has a stronger effect on the day and night returns of Chinese ADRs. They find that ADRs night returns are affected by both the U.S. and Chinese markets. However, single-listed ADRs are more heavily affected by the U.S. market than by their home market.

In this study we propose the following research questions: do single-listed ADRs offer the same diversification value as dual-listed ADRs? Are single-listed ADRs as directly exposed to U.S. market risk factors as dual-listed ADRs? In comparison with dual-listed ADRs, do single-listed ADRs behave similar to their home geographical region market? These are important issues as, to the best of our knowledge, the diversification value of single-listed ADRs being tested in comparison with that of dual-listed ADRs has yet to be studied.

We follow the approach in Pennathur, Delcoure, and Anderson (2002), and Phengpis and Swanson (2009). These authors use orthogonal returns in two-factor models to infer the exposure to U.S. and foreign markets of country iShares and country closed-end funds (Pennathur, Delcoure, and Anderson 2002), and country iShares (Phengpis and Swanson 2009). Our study is closer to Pennathur et al. (2002), as they compare country iShares with corresponding country closed-end country funds, and we compare single-listed with dual-listed ADRs. Pennathur et al. (2002) find that country iShares are directly exposed to home country risk. They also conclude that both, country iShares and closed-end country funds are considerably exposed to the U.S. market, thus offering limited diversification value to U.S. investors. However, we follow more closely the methodology in Phengpis and Swanson (2009), which shows that country iShares are not as directly exposed to U.S. market risk, and thus provide diversification value comparable to direct foreign investments.

2. Data and methodology

We examine a sample of single-listed ADRs and corresponding dual-listed ADRs from the same geographical zone[1]. Our samples of ADRs comes from the Bank of New York-Mellon, and Citibank[2]. Table 1 provides a description of our samples of ADRs. We examine a total of 152 ADRs, 76 single and 76 dual-listed. The most active firms issuing single-listed ADRs come from Asia. A total of 69 ADRs are from Asia, and only 7 are from Europe. Panel B of Table 1 shows the distribution across countries. China is the home country of the vast majority of the single-listed ADRs in the sample with 64, followed by France, India, and Ireland with only 2 single-listed ADRs. Single-listed ADRs are evenly present in the two most prominent U.S. exchanges. In our sample, 36 single-listed ADRs list their shares in the NYSE, and 40 in NASDAQ.

[1] The best would be to match by country, but it is not possible given the single-listed ADRs available at this time.
[2] We also used the website: www.adr.com.

In the analysis that follows, we use daily return data during the 2004-2012 time period. To represent the U.S., as in previous studies, we use the S&P 500 index. We consider two foreign regions, Asia and Europe, and one foreign country, China. To represent these foreign markets, we use the returns of MSCI indexes.

We closely follow Pennathur, Delcoure, and Anderson (2002), and Phengpis and Swanson (2009). To measure how close the return of the DARs in the sample are to their corresponding MSCI index return we estimate the following model:

$$R_{\mathrm{i,t}} = \alpha_{\mathrm{i}} + \beta_{\mathrm{i}} R_{\mathrm{m,t}} + e_{\mathrm{i,t}} , \tag{1}$$

where

$R_{\mathrm{i,t}}$ = the return on ADR *i* at time *t*;

$R_{\mathrm{m,t}}$ = the return on the respective index *m* at time *t*;

β_{i} = the coefficient on the respective index return; and

$e_{\mathrm{i,t}}$ = the error term.

As in the studies mentioned above, the value of R^2 provide information on the tracking effectiveness of the securities, and a beta of 1 denotes that the ADR return mimics the corresponding MSCI index. The diversification value, and risk exposure of single and dual-listed ADRs is then examined by estimating a two-factor model also presented in Pennathur, Delcoure, and Anderson (2002), and Phengpis and Swanson (2009). As a first step, we generate orthogonal returns for each market index, the regional and country MSCI (Asia, Europe, and China), and the S&P 500. The returns of each MSCI index are regressed against the S&P 500 returns, and thus the residuals are the portion of the regional MSCI returns that are not explained by (or related to) the returns of the U.S. market as represented by the S&P 500. This procedure is repeated with the returns of the S&P 500 as the dependent variable, and the returns of each MSCI index as the independent variable. In this case, the residuals of the regression represent the return of the U.S. market that is free from the part of the MSCI index return that is correlated with U.S. We then investigate the direct exposure of single and dual-listed ADRs to their regional market and to the U.S. market.

The two-factor model we estimate is:

$$R_{i,t} = \alpha_i + \beta_{US,i} R_{US,t} + \beta_{\mathrm{home},i} R_{\mathrm{home},t} + e_{i,t} , \tag{2}$$

where

$R_{i,t}$ = the return on ADR *i* at time *t*;

$R_{US,t}$ =the return on the U.S. stock index (S&P 500) at time *t;*

$R_{\text{home},t}$ =the residual from a regression of the MSCI return for the fund *i* on the S&P 500 returns at time *t*;

$\beta_{US,i}$ =the coefficient on the return for the U.S. index;

$\beta_{\text{home},i}$ = a coefficient on the return of the residual resulting from regressing the regional MSCI returns for security *i* on the U.S. index; and

$e_{i,t}$ =the error term.

The model in equation 2, is then estimated with the orthogonal returns of the US, and the returns of the regional MSCI index. When the model includes the orthogonal returns of the regional MSCI index, the model estimates the exposure of both types of ADRs to the true regional risk factor that is, extracting the correlation effect between the regional MSCI index and the U.S. index. The results of this estimation, will shed light on the level of international diversification provided by each type of ADR. When the model includes the orthogonal returns of the S&P 500, the model is used to the test the level of direct exposure to U.S. market risk.

3. Empirical results

3.1 Risk factors and diversification value

3.1.1 Portfolios

As a first step, we compute equally weighted portfolios of single-listed and dual-listed ADRs. We then estimate the two-factor model, first with the orthogonalized regional MSCI return, a tests of true diversification value. And then with the orthogonalized U.S. return, a test of how strong is the contribution of the U.S. market to ADRs return. Table 2 Panel A shows the results when the return of the MSCI index is orthogonalized. The factor loadings provide evidence of limited diversification value provided by both types of ADRs, as the β_{HOME} is lower than the β_{US}. Panel B of Table 2, shows that the U.S. have a strong influence in the return of both types of ADRs, as the β_{US} is always higher than the β_{HOME}. In terms of explanatory power, regardless of which index return is orthogonalized, the two-factor models do a much better job explaining the return of the dual-listed ADRs portfolio.

3.1.2 Individual ADRs

To test the true diversification value of single-listed and dual-listed ADRs, we estimate the two-factor model with orthogonalized regional MSCI return for each ADR in the samples. The results are presented in Table 3. Panel A of Table 3 shows the results for all the ADRs in the sample. Although most of the betas are significant, we find no evidence of true diversification value by either of the ADRs samples. Specifically, β_{HOME} is higher than β_{US} for only 4 single-listed ADRs and 2 dual-listed ADRs. We also find no difference in terms of the diversification value of single-listed ADRs versus dual-listed, as there is no statistical difference between the average β_{HOME} of single versus dual-listed ADRs.

Panels B and C of Table 3 presents the results for the sample of Asian ADRs, and European ADRs respectively. Again we find no difference in terms of the diversification value provided by the two types of funds. Also, only 3 single-listed and 2 dual-listed ADRs have β_{HOME} higher than β_{US}. Finally, Panel C shows that European dual-listed ADRs potentially provide more true-diversification value than single-listed ADRs. As dual-listed ADRs β_{HOME} is significantly higher than that of single-listed ADRs. However, this result could be spurious, as each sample includes only 7 ADRs. Moreover, none of the dual-listed ADRs have β_{HOME} higher than β_{US}. In sum, neither type of type of ADR offers true-diversification value.

We now test the level of direct exposure to U.S. market risk by estimating the two-factor model with orthogonalized U.S. market return. Table 4 Panel A shows the results for the complete sample of ADRs. We find that both types of ADRs are directly exposed to U.S. market risk. The average β_{US} is higher than β_{HOME}, when the return of the U.S. market is orthogonalized. This is also true for 65 single-listed ADRs and 69 dual-listed ADRs. We do find that dual-listed ADRs are more directly exposed to U.S. market risk, as the dual-listed average β_{US} is significantly higher than that of the single-listed ADRs. This result is also true for the two sub-samples (Asian and European) ADRs.

3.2 The case of China

Although firms from many countries issue single-listed ADRs, without a doubt, China dominates this market. In fact, as of October of 2013, the Bank of New York Mellon reports a total of 140 active ADRs of these, 89 are Chinese. In fact, most of research on single-listed ADRs, mentioned in the introduction, is on Chinese ADRs. However, we believe that the significant level of issuance of Chinese single-listed ADRs, can be thought of as one of the topics Zhang and King (2010) referred to when they argue that many aspects of the ever evolving Chinese market are “under-researched”.

Our samples includes 64 single-listed ADRs and 24 dual-listed. We repeat the test of true-diversification and direct exposure to U.S. market risk with a sample of 48 ADRs. We pair each dual-listed Chinese ADR with a single-listed ADR. The results are presented in Table 6 and 7. Table 6 presents the results for equally weighted portfolios and Table 7 does the same for individual ADRs. Table 6 shows that the model works better explaining the returns of dual-listed Chinese ADRs, as the R2 is much higher. Regardless of the model, all betas are highly significant.

We again find, a limited level of true-diversification. When the return of the MSCI China is orthogonalized, none of the portfolios have β_{HOME} higher than β_{US}. In contrast, when the return of the S&P 500 is orthogonalized, both portfolios have β_{US} higher than β_{HOME}. Table 7 reports the results for individual ADRs, and we find again that none of the two types of ADRs offers true-diversification. Also, we find evidence that both types are directly exposed to U.S. market risk, and most of the individual ADRs have β_{US} higher than β_{HOME}, when the return of the U.S. market is orthogonalized. Finally, dual-listed Chinese ADRs are more exposed to U.S. market risk as average β_{US} is significantly higher than that of the Chinese single-listed ADRs.

Finally, given that China is the country with more active single-listed ADRs and the results above, we test if portfolios of single, and dual-listed ADRs behave differently from the Chinese market. As in Phengpis and Swanson (2009), we use the single factor model to test the null hypothesis that $\alpha_i = 0$, and $\beta_{HOME} = 1$. The dependent variable is the return of the equally weighted portfolio of ADRs, and the independent variable is the return of the MSCI China index. The results are presented in Table 7. For both portfolios, we find that β_{HOME} is highly significant, but very low R2. Based on the *F-statistic* we can reject the null hypothesis for both portfolios of ADRs, and conclude that they behave significantly different from the Chinese MSCI index. This result confirms our previous findings. Single-listed and dual-listed ADRs are not fully exposed to home country market risk.

4. Conclusions

The under-lying shares of single-listed ADRs are not traded in the ADRs home country. This poses a risk to U.S. investors, as the investors will be left with unlisted ordinary shares if the ADR program is terminated or the investor decides to render their ADRs shares. This is the most significant difference between single and dual-listed ADRs. In this study we examine, and compare, the true-diversification value and exposure to U.S. market risk of single and dual-listed Asian and

European ADRs during the 2004-2012 time period. We find that both types of ADRs fail as a diversification tool for U.S. investors. Single and dual-listed ADRs are not directly exposed to their regional markets, after we control for the correlation between the regional market and the U.S. We do find that both types of ADRs are directly exposed to U.S. market risk, on and above the risk inherent in their corresponding regional markets. Dual-listed ADRs are significantly more exposed to U.S. market risk than single-listed ADRs.

China is the country with more single-listed ADRs in U.S. exchanges. We examine the same issues with samples of Chinese ADRs. In this case the tests are more robust, as the home market is China, not a regional market. We again find, that both types of ADRs fail to provide true-diversification value, and are directly exposed to U.S. market risk. Given these results, we test and find significant evidence, that both single and dual-listed Chinese ADRs behave significantly different from the Chinese market.

References

Bae, Kee-Hong, and Wei Wang. "What's in a “China” name? A test of investor attention hypothesis." *Financial Management* 41.2 (2012): 429-455.

He, Hui, and Jiawen Yang. "Day and night returns of Chinese ADRs." *Journal of Banking & Finance* 36.10 (2012): 2795-2803.

Luo, Yongli, Fang Fang, and Omar A. Esqueda. "The overseas listing puzzle: Post-IPO performance of Chinese stocks and ADRs in the US market." *Journal of Multinational Financial Management* 22.5 (2012): 193-211.

Phengpis, Chanwit, and Peggy E. Swanson. "iShares and the US market risk exposure." *Journal of Business Finance & Accounting* 36.7-8 (2009): 972-986.

Pennathur, Anita K., Natalya Delcoure, and Dwight Anderson. "Diversification Benefits of iShares and Closed-End Country Funds." *Journal of Financial Research* 25.4 (2002): 541-557.

Table 1: Sample Description

Panel A: Geographical zone	Single	Dual	Total
Asia	69	69	138
Europe	7	7	14
Total	76	76	152

Panel B: Country	Single	Dual	Total
Australia	0	8	8
China	64	24	88
France	2	2	4
Germany	0	2	2
Hong Kong	1	1	2
India	2	9	11
Indonesia	0	2	2
Ireland	2	0	2
Italy	1	0	1
Japan	0	13	13
Korea	1	7	8
Netherlands	1	0	1
Spain	0	1	1
Taiwan	1	5	6
United Kingdom	1	2	3

Panel C: Exchange	Single	Dual	Total
NYSE	36	64	100
NASDAQ	40	12	52

Table 2: Two-Factor Models for Portfolios

Panel A: Model 1 - Orthogonalized MSCI Index Return

	Single			Dual		
Region	Beta US	Beta Home Ort	R-squared	Beta US	Beta Home Ort	R-squared
Asia	0.989 ***	0.389 ***	0.364	1.170 ***	0.335 ***	0.792
	(0.000)	(0.000)		(0.000)	(0.000)	
Europe	0.630 ***	0.212 ***	0.204	1.335 ***	0.456 ***	0.812
	(0.000)	(0.000)		(0.000)	(0.000)	

Panel B: Model 2 - Orthogonalized US Market Return

	Single			Dual		
Region	Beta US Ort	Beta Home	R-squared	Beta US Ort	Beta Home	R-squared
Asia	0.927 ***	0.544 ***	0.364	1.116 ***	0.521 ***	0.792
	(0.000)	(0.000)		(0.000)	(0.000)	
Europe	0.487 ***	0.460 ***	0.204	1.026 ***	0.979 ***	0.812
	(0.000)	(0.000)		(0.000)	(0.000)	

Notes:

***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table 3: Two-Factor Model 1 - Orthogonalized MSCI Index Return for Individual ADRs

	Single		Dual	
	US Market Return	Orthogonalized Home Index Return	US Market Return	Orthogonalized Home Index Return
Panel A: All ADRs				
Average of Beta	0.914	0.297	1.118	0.340
Number of ADRs with Statistically Significant Betas				
at the 1% level (p-value < 0.01)	70	50	74	64
at the 5% level (0.01 < p-value < 0.05)	2	10	0	3
at the 10% level (0.05 < p-value < 0.10)	2	3	0	3
Number of ADRs with Statistically Insignificant Betas	2	13	2	6
Total Number of ADRs	76	76	76	76
Average of R-Squared	0.116		0.321	
Single versus Dual Comparison of Betas				
Average Difference	-0.204 ***	-0.043		
p-value	(0.008)	(0.475)		
Count of Beta Ortho Home > Beta US	4		2	
Panel B: Asia ADRs				
Average of Beta	0.943	0.300	1.096	0.329
Number of ADRs with Statistically Significant Betas				
at the 1% level (p-value < 0.01)	64	47	67	57
at the 5% level (0.01 < p-value < 0.05)	2	10	0	3
at the 10% level (0.05 < p-value < 0.10)	2	1	0	3
Number of ADRs with Statistically Insignificant Betas	1	11	2	6
Total Number of ADRs	69	69	69	69
Average of R-Squared	0.116		0.298	
Single versus Dual Comparison of Betas				
Average Difference	-0.153 *	-0.029		
p-value	(0.058)	(0.663)		
Count of Beta Ortho Home > Beta US	3		2	
Panel C: Europe ADRs				
Average of Beta	0.631	0.269	1.337	0.454
Number of ADRs with Statistically Significant Betas				
at the 1% level (p-value < 0.01)	6	3	7	7
at the 5% level (0.01 < p-value < 0.05)	0	0	0	0
at the 10% level (0.05 < p-value < 0.10)	0	2	0	0
Number of ADRs with Statistically Insignificant Betas	1	2	0	0
Total Number of ADRs	7	7	7	7
Average of R-Squared	0.122		0.546	
Single versus Dual Comparison of Betas				
Average Difference	-0.706 ***	-0.185 **		
p-value	(0.002)	(0.037)		
p-value[1]	(0.006)	(0.048)		
Count of Beta Ortho Home > Beta US	1		0	

Notes:

***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

[1] p-value corresponds to a Mann-Whitney U Test for mean ranks. This test does not require normally distributed data.

Table 4: Two-Factor Model 2 - Orthogonalized US Market Return for Individual ADRs

	Single				Dual	
	Orthogonalized US Market Return		Home Index Return		Orthogonalized US Market Return	Home Index Return
Panel A: All ADRs						
Average of Beta	0.831		0.486		1.039	0.554
Number of ADRs with Statistically Significant Betas						
at the 1% level (p-value < 0.01)	65		67		73	70
at the 5% level (0.01 < p-value < 0.05)	6		2		1	2
at the 10% level (0.05 < p-value < 0.10)	2		2		0	1
Number of ADRs with Statistically Insignificant Betas	3		2		2	1
Total Number of ADRs	76		76		76	76
Average of R-Squared	0.116				0.321	
Single versus Dual Comparison of Betas						
Average Difference	-0.208	***	-0.069			
p-value	(0.006)		(0.332)			
Count of Beta Ortho US > Beta Home	65				69	
Panel B: Asia ADRs						
Average of Beta	0.872		0.485		1.040	0.511
Number of ADRs with Statistically Significant Betas						
at the 1% level (p-value < 0.01)	61		61		66	63
at the 5% level (0.01 < p-value < 0.05)	4		2		1	2
at the 10% level (0.05 < p-value < 0.10)	2		2		0	1
Number of ADRs with Statistically Insignificant Betas	2		2		2	1
Total Number of ADRs	69		69		69	69
Average of R-Squared	0.116				0.298	
Single versus Dual Comparison of Betas						
Average Difference	-0.168	**	-0.026			
p-value	(0.034)		(0.725)			
Count of Beta Ortho US > Beta Home	62				64	
Panel C: Europe ADRs						
Average of Beta	0.427		0.495		1.028	0.979
Number of ADRs with Statistically Significant Betas						
at the 1% level (p-value < 0.01)	4		6		7	7
at the 5% level (0.01 < p-value < 0.05)	2		0		0	0
at the 10% level (0.05 < p-value < 0.10)	0		0		0	0
Number of ADRs with Statistically Insignificant Betas	1		0		0	0
Total Number of ADRs	7		7		7	7
Average of R-Squared	0.122				0.546	
Single versus Dual Comparison of Betas						
Average Difference	-0.601	***	-0.485	***		
p-value	(0.005)		(0.002)			
p-value[1]	(0.006)		(0.004)			
Count of Beta Ortho US > Beta Home	3				5	

Notes:

***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

[1] p-value corresponds to a Mann-Whitney U Test for mean ranks. This test does not require normally distributed data.

Table 5: Two-Factor Models for China Portfolio

	Single			Dual		
Model	Beta US	Beta Home Ort	R-squared	Beta US	Beta Home Ort	R-squared
Orthogonalized MSCI Index Return	0.945 ***	0.300 ***	0.354	1.291 ***	0.445 ***	0.693
	(0.000)	(0.000)		(0.000)	(0.000)	

	Single			Dual		
Model	Beta US Ort	Beta Home	R-squared	Beta US Ort	Beta Home	R-squared
Orthogonalized US Market Return	0.853 ***	0.431 ***	0.354	1.150 ***	0.617 ***	0.693
	(0.000)	(0.000)		(0.000)	(0.000)	

Notes:

***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table 6: Two-Factor Models for Individual ADRs from China

Panel A: Model 1 - Orthogonalized MSCI Index Return

	Single		Dual	
	US Market Return	Orthogonalized Home Index Return	US Market Return	Orthogonalized Home Index Return
Average of Beta	0.914	0.290	1.155	0.366
Number of ADRs with Statistically Significant Betas				
at the 1% level (p-value < 0.01)	23	23	23	18
at the 5% level (0.01 < p-value < 0.05)	0	0	0	1
at the 10% level (0.05 < p-value < 0.10)	1	0	0	1
Number of ADRs with Statistically Insignificant Betas	0	1	1	4
Total Number of ADRs	24	24	24	24
Average of R-Squared	0.134		0.297	
Single versus Dual Comparison of Betas				
Average Difference	-0.241 *	-0.077 *		
P-value	(0.063)	(0.093)		
Count of Beta Ortho Home > Beta US	1		0	

Panel B: Model 2 - Orthogonalized US Market Return

	Single		Dual	
	Orthogonalized US Market Return	Home Index Return	Orthogonalized US Market Return	Home Index Return
Average of Beta	0.826	0.426	1.040	0.527
Number of ADRs with Statistically Significant Betas				
at the 1% level (p-value < 0.01)	22	23	22	20
at the 5% level (0.01 < p-value < 0.05)	1	1	1	2
at the 10% level (0.05 < p-value < 0.10)	0	0	0	1
Number of ADRs with Statistically Insignificant Betas	1	0	1	1
Total Number of ADRs	24	24	24	24
Average of R-Squared	0.134		0.297	
Single versus Dual Comparison of Betas				
Average Difference	-0.213 *	-0.101 *		
P-value	(0.074)	(0.086)		
Count of Beta Ortho US > Beta Home	21		23	

Notes:
***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table 7: Single-Index Model for Portfolio of ADRs from China

	Single				Dual			
	Intercept	Beta China Index	F-Statistic for H_0: α=0, β=1	R-squared	Intercept	Beta China Index	F-Statistic for H_0: α=0, β=1	R-squared
	0.000	0.431 ***	264.163 ***	0.124	0.000	0.617 ***	161.852 ***	0.270
	(0.717)	(0.000)	(0.000)		(0.349)	(0.000)	(0.000)	

Notes:

***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

The p-values for the coefficients are based on the t-statistics with the heteroskedasticity consistent standard errors of White, 1980.