NORTH-HOLLAND

Financial Services Review 9 (2000) 171–181

FINANCIAL SERVICES REVIEW

The information content of closed-end country fund discounts

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Received 20 July 1999; received in revised form 25 July 2000; accepted 22 August 2000

Abstract

This paper examines whether premiums and discounts on closed-end country mutual funds (CECFs) contain useful information about future returns. We find that higher CECF premiums are associated both with higher future returns on the relevant foreign market index and with higher future NAV returns after controlling for the foreign market return. CECFs trading at large discounts are not necessarily bargains, because their future NAV performance can be expected to be relatively poor.

JEL classification: G14; G15; G23

Keywords: Closed-end fund; Discount; Investor sentiment

1. Introduction

Both open-end and closed-end mutual funds pool shareholders' money and invest in financial securities. But while open-end mutual funds stand ready to issue or redeem shares at their net asset value (NAV) at any time, closed-end funds do not. Closed-end fund shares trade on an exchange like an individual stock, and the share price can fluctuate above or below NAV. When the share price is higher (lower) than NAV, the fund is said to trade at a premium (discount).

The "managerial performance" theory and the "investor sentiment" theory provide two

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1057-0810/00/$ – see front matter
PII: S1057-0810(00)00064-0

rationales for variations in closed-end fund premiums across funds and over time. The managerial performance theory (Malkiel, 1977) hypothesizes that premiums vary with the skills of fund managers; funds that charge high expenses or frequently select poorly-performing stocks will sell at a large discount from NAV. The investor sentiment theory (Zweig, 1973; Lee, Shleifer & Thaler, 1991) posits that changes in the (possibly irrational) expectations of individual investors cause the premium to fluctuate over time. When individual investors become more optimistic about the future performance of the underlying investments of the fund, the premium increases.

One closed-end fund category of particular interest is closed-end country funds (CECFs). CECFs invest exclusively in a single foreign stock market. CECFs are intriguing because fund shares and underlying assets trade in different markets. Since few open-end funds specialize in a single foreign market (six Fidelity funds are the major exception), investing in a CECF is often the only way for an individual to purchase a well-diversified portfolio of stocks in a specific foreign country. Thus, CECF discounts provide a unique gauge of U.S. investors' valuation of the stock market in the country.

This paper empirically examines the information content of CECF discounts for future returns, testing elements of both the managerial performance and investor sentiment theories. First, we test whether the discount forecasts the fund's future NAV performance, controlling for the return on the foreign market and exchange rate risk. In theory, if investors believe that a particular fund manager has superior stock-picking ability, they will pay a high price for that fund relative to NAV. Discounts should be larger for funds with inferior managers. Likewise, if investors believe a fund incurs excessive operating expenses or transaction costs, the discount will be large, because high expenses will likely translate into relatively low NAV returns. Our managerial performance test updates previous research of Hardouvelis, La Porta and Wizman (1994).

We also test whether the CECF discount forecasts the future return on the market index of the foreign country. Since CECF shares trade in the U.S. market but the underlying fund assets trade in a much less accessible foreign market, investing in a CECF is usually the most efficient way for U.S. residents to bet on the prospects for a specific foreign market. For example, suppose U.S. investors increase their expectations of future earnings from Taiwanese stocks, but Taiwanese investors do not. All else equal, the Taiwan CECF share price will increase, but the NAV will stay the same, narrowing the discount or increasing the premium. If U.S. investor opinion or sentiment, as manifested in the CECF share price, contains useful information about the foreign market not yet fully reflected in NAV, an above-average premium should be associated with above-average future foreign market returns.

2. Theory and literature review

The investor sentiment theory of closed-end fund pricing can be traced to Zweig (1973), who hypothesizes that relatively uninformed individuals are the primary investors in closed-end fund shares. To Zweig, actions of these uninformed investors are contrary indicators of future stock market performance. When uninformed investors become optimistic, closed-end fund premiums increase, and future stock market performance is then expected to be poor.

Using data from 1965–1971, Zweig finds that the frequency of week-to-week increases in premiums for domestic stock funds predicts the future return on the Dow Jones Industrial Average. When the number of increases in premiums is abnormally high in a given week, future DJIA returns are relatively low.

Lee, Shleifer and Thaler (1991) further develop the investor sentiment theory. Individuals, rather than institutions like pension funds, are the primary investors in both closed-end funds and small-company stocks. According to this theory, when individual investors become more optimistic about the stock market, the prices of both small-company stocks and closed-end funds are driven up relative to the value of large-company stocks, which comprise the majority of closed-end fund portfolios. Since individual investor optimism increases the fund's price, but not its NAV, the discount will narrow. Using data from 1965–85, they find that the average discount on domestic stock funds is inversely related to the excess return on small-company stocks versus large-company stocks.

Bodurtha, Kim and Lee (1995) test the investor sentiment hypothesis using CECF data over the January 1986-December 1990 period. They find that changes in the average premium on CECFs are positively related to the return on the U.S. stock market, controlling for the return on the foreign market and exchange rate movements. Presumably, when U.S. investors become more optimistic, they drive up prices of domestic stocks and CECFs at the same time. In a similar vein, Bailey and Lim (1992) find that U.S. stock indexes exhibit a higher positive correlation with CECF share prices than with their underlying foreign market indexes, suggesting CECF discounts are influenced by U.S. investor sentiment.

The managerial performance theory can be traced to Boudreaux (1973) and Malkiel (1977). If a manager is perceived to be highly skilled at stock selection or market timing, investors will bid up the price of fund shares, and the fund will trade at a premium. Similarly, if a fund levies excessive annual management fees, it should sell at a discount. Controlling for other variables, Malkiel (1977, 1995) finds no relation between the domestic fund discounts and either historical performance or management fees. Thus, past performance and management expenses do not appear to explain cross-sectional variation in discounts for domestic stock funds. Other authors test the managerial performance theory by examining the relation between premiums and future (rather than past) performance. For domestic stock funds, Pontiff (1994) finds no evidence that premiums predict future NAV returns. Using a sample including both domestic and international funds, Chay and Trzcinka (1999) uncover evidence supporting the managerial performance hypothesis. Using data from 1963–93, and adjusting for risk using several different U.S. market benchmarks, they find that higher premiums forecast superior NAV performance.

Hardouvelis et al. (1994) test the managerial performance theory for CECFs over the January 1985-January 1993 period. When running separate regressions for each fund, they find only a weak relation between premiums and future NAV returns. But running separate regressions is not a powerful procedure, because it cannot detect situations where some funds consistently sell at higher premiums than other funds because they have better managers. Hardouvelis et al. (1994) then pool data and restrict regression coefficients to be equal across funds, thereby comparing the performance of one fund against another, and uncover a positive and significant relationship between premiums and future NAV returns. Funds trading at a premium achieve higher future performance than funds trading at a discount.

The effect of investment restrictions on CECF premiums complicates testing the investor sentiment and managerial performance theories. Errunza (1991), building on the work of Errunza and Losq (1985, 1989), develops a theoretical model of closed-end country fund premiums, showing that premiums depend on the ease of direct investment in the stock market of the country. U.S. investors, including open-end mutual funds, can freely trade individual stocks in some foreign markets (United Kingdom) but are subject to ownership limits in others (Singapore). American Depository Receipts (ADRs) trade on the New York Stock Exchange for many companies from some markets (Mexico), but are rare or nonexistent for companies in other markets (Malaysia). The more difficult investment in a country through open-end mutual funds or ADRs, the larger is the expected CECF premium. Bonser-Neal, Brauer, Neal and Wheatley (1990) find that announcements of liberalizations of investment restrictions in a country generally lead to decreases in CECF premiums. Errunza (1991), Bodurtha et al. (1995), and Hardouvelis et al. (1994) present evidence that premiums are higher for CECFs investing in restricted markets. The next section describes the implications of investment restrictions for our tests.

3. Data and methodology

Each weekend, *Barron's* reports closed-end fund share price and NAV data. We collect data for 38 funds with at least two years of operations over the January 1988-March 1997 period. We exclude four China CECFs because we lack data on Chinese market index returns, and two funds specializing in gold stocks.

Most funds report weekly NAV as of Friday afternoon in the United States, and *Barron's* reports Friday's NYSE closing share price along with it. But a few funds report NAV as of Thursday or Wednesday. The India Growth fund consistently reported NAV from Wednesday, and *Barron's* reported Wednesday's closing share price for that fund. Brazil, Brazilian Equity, Emerging Mexico, Mexico, Mexico Equity & Income, Singapore, and Taiwan consistently reported NAV from Thursday, and *Barron's* reported Thursday's closing share price for those funds. Thus, even for funds reporting NAV as of Wednesday or Thursday, the CECF share price is measured at the close of trading on the same day.

NAV data are unavailable for 266 out of 14,414 observations (less than 2%). Following Bekaert and Urias (1996), we use the NAV from the previous week as a proxy for these observations. In the few cases that a CECF share price is not available in *Barron's*, prices come from the *Wall Street Journal* or the Center for Research in Security Prices (CRSP) tapes.

We compute weekly foreign market index returns, foreign exchange rates, and world market returns from Morgan Stanley Capital International (MSCI) daily index data. The MSCI data come from DRI/McGraw Hill.

Table 1 presents the list of 38 funds, the number of weekly observations available for each, the mean percentage premium (with a negative number indicating a discount), and the mean weekly NAV return. The NAV return measures the performance of the underlying assets of the fund, defined as

Table 1
Descriptive statistics

Country	Fund	N	Mean Weekly Premium	Mean Weekly NAV Return	Mean Weekly Foreign Market Return
Argentina	Argentina	282	5.38%	0.20%	0.19%
Australia	First Australia	481	−12.83%	0.15%	0.18%
Austria	Austria	388	−9.74%	0.08%	0.05%
Brazil	Brazil	267	−3.24%	0.49%	0.65%
Brazil	Brazilian Equity	258	−0.58%	0.45%	0.53%
Chile	Chile	387	−6.80%	0.49%	0.49%
France	France Growth	347	−14.25%	0.13%	0.14%
Germany	Emerging Germany	360	−15.85%	0.05%	0.16%
Germany	Germany	481	−2.11%	0.26%	0.26%
Germany	New Germany	371	−14.73%	0.14%	0.15%
India	India Growth	220	10.79%	0.00%	0.12%
Indonesia	Indonesia	366	13.13%	−0.01%	−0.03%
Indonesia	Jakarta	361	2.38%	0.02%	−0.04%
Ireland	Irish Investment	362	−14.87%	0.19%	0.15%
Israel	First Israel	172	−1.91%	0.06%	−0.13%
Italy	Italy	330	−8.06%	0.04%	0.10%
Japan	Japan Equity	240	4.16%	0.19%	0.16%
Japan	Japan OTC Equity	350	4.92%	−0.14%	0.00%
Korea	Korea	481	34.75%	0.15%	0.06%
Korea	Korea Equity	172	−1.62%	−0.33%	−0.16%
Korea	Korean Investment	262	3.53%	−0.13%	0.02%
Malaysia	Malaysia	481	−3.97%	0.35%	0.35%
Mexico	Emerging Mexico	234	−1.36%	0.23%	0.20%
Mexico	Mexico	450	−10.36%	0.54%	0.63%
Mexico	Mexico Equity & Income	297	−4.03%	0.30%	0.20%
Pakistan	Pakistan	168	−12.01%	−0.47%	−0.30%
Philippines	First Philippine	382	−17.53%	0.28%	0.29%
Portugal	Portugal	383	−7.45%	0.11%	0.04%
Singapore	Singapore	346	−2.00%	0.22%	0.25%
Spain	Growth Fund of Spain	366	−15.41%	0.17%	0.16%
Spain	Spain	453	2.91%	0.16%	0.12%
Switzerland	Switzerland	481	−6.44%	0.19%	0.30%
Taiwan	ROC Taiwan	409	−0.02%	0.11%	0.10%
Taiwan	Taiwan	481	13.76%	0.52%	0.42%
Thailand	Thai	463	6.60%	0.28%	0.27%
Thailand	Thai Capital	354	−7.22%	0.07%	0.06%
Turkey	Turkey	379	7.77%	0.12%	0.30%
United Kingdom	United Kingdom	481	−13.74%	0.21%	0.18%

$$\text{NAV Return}_t = [\text{NAV}_t + D_t - \text{NAV}_{t-1}]/\text{NAV}_{t-1,} \quad (1)$$

where D_t is the amount of dividend and capital gain distributions paid to shareholders in week t. All returns are adjusted for stock splits. Distribution and stock split data come from the CRSP tapes.

To test the managerial performance theory, we want to compare funds against one another over a common time period. We estimate a seemingly unrelated regression (SUR) system of equations for the 30 of 38 funds that have complete return data over January 1991 through March 1997:

$$\text{NAV Return}_t = a_0 + a_1\text{PREM}_{t-1} + a_2\text{FMR}_t + a_3\text{FXR}_t + e_t \quad (2)$$

where:

NAV Return_t = rate of return on NAV for week t

PREM_{t-1} = [CECF Share Price - NAV]/NAV for week t-1, the percentage premium on the fund

FMR_t = foreign market rate of return for week t, measured in U.S. dollars

FXR_t = percentage change in the spot foreign exchange rate over week t, measured as of the close of trading in the foreign country, in units of U.S. dollar per unit of foreign currency

The foreign market return, FMR_t, is included in the regression to control for the market or systematic component of the NAV return on the fund. Following Bodurtha et al. (1995) and Hardouvelis et al. (1994), we also include FXR_t, the change in foreign exchange rates over week t, as a control variable. CECFs may use futures or forward contracts to hedge foreign exchange risk. As a result, exchange rate fluctuations could influence the relation between the dollar NAV return and the dollar foreign market index return.

We restrict the coefficient a_1 to be equal across all 30 funds in estimating the SUR system. By applying this restriction, a_1 can be interpreted as the marginal sensitivity of the week t NAV return to the deviation of the week t-1 premium from the mean across all funds and dates. Coefficients on FMR_t and FXR_t are unrestricted, so each fund has its own beta with respect to its foreign market and its own sensitivity to foreign exchange fluctuations. Our specification is somewhat more flexible than Hardouvelis et al. (1994), who restrict the FMR_t and FXR_t coefficients to be the same across funds. The null hypothesis is $a_1 = 0$, that the CECF premium contains no information about the future NAV return on the fund, controlling for other variables. If investment restrictions (Errunza, 1991) cause premiums to vary across funds, our test remains valid but is less powerful than it would be without such confounding factors.

Weekly returns for all variables in Eq. (2) are measured Friday-to-Friday for funds reporting NAV on Friday, Thursday-to-Thursday for funds reporting NAV on Thursday, and Wednesday-to-Wednesday for the India Growth fund. CECF shares trade on the NYSE until 4 p.m., but the underlying foreign market closes earlier. Thus, the end-of-week t-1 CECF share price inevitably contains some information about the week t foreign market return not yet incorporated into end-of-week t-1 NAV. This nonsynchronicity induces a spurious positive correlation between the week t-1 premium and the week t NAV return. However, our multivariate tests should be free of bias because we include the week t foreign market return FMR_t as a regressor. FMR_t captures any information about the foreign market return between the foreign market and NYSE close on the last day of week t-1 that gets reflected in the week t-1 premium.

To see if CECF premiums have information content for future foreign market returns, we regress foreign market index returns in week t on the CECF premium at the end of week t-1 and the return on the world market portfolio in week t for each of the 38 individual funds:

$$\text{FMR}_t = b_0 + b_1\text{PREM}_{t-1} + b_2\text{WMR}_t + e_t \quad (3)$$

where:

FMR_t = foreign market rate of return for week t, measured in U.S. dollars
$PREM_{t-1}$ = [CECF Share Price - NAV]/NAV at the end of week t-1
WMR_t = MSCI world market rate of return for week t, measured in U.S. dollars

Since individual foreign market returns are influenced by the contemporaneous world market return, WMR_t is included as a control variable. The null hypothesis of interest is $b_1 = 0$, that the premium does not predict the subsequent week's foreign market return. Since we can test this hypothesis by running individual regressions for each fund, funds from countries with strict investment restrictions stay separate from funds in more open markets.

As noted earlier, the NYSE closes at 4 p.m. Eastern Time but most foreign markets close earlier. The time lag is particularly long for Asian funds, where markets can close 12 hr or more before the NYSE. Because of this time lag, the CECF premium could contain information about the "true" (though as yet unobservable) return on the foreign index between the foreign market close and the U.S. market close. To avoid any spurious correlation resulting from the time lag, for funds reporting NAV on Friday, foreign market and world market returns are measured over the following Monday close-to-Monday close week. Funds reporting NAV on Thursday and Wednesday use Friday-to-Friday and Thursday-to-Thursday foreign and world market returns respectively.

4. Empirical results

Table 2 presents regression results from Eq. (2). The coefficient on $PREM_{t-1,}$ restricted to be the same across funds, is 0.0108 with a t-statistic of 6.273, significant at the 1% level using Newey and West (1987) standard errors with one lag. For example, if a fund trades at a premium that is 0.10 higher than the overall average $PREM_{t-1}$ for the sample, then the NAV return on that fund over the next week tends to be abnormally high by 0.10(0.0108) = 0.00108 or 0.108%.

The results in Table 2 suggest that CECF premiums contain valuable information about future NAV performance after controlling for the foreign market return and exchange rate fluctuations. This is consistent with the managerial performance hypothesis. Our results update the findings of Hardouvelis et al. (1994) over four more recent years of data.

To test the robustness of our results, we also estimate a more general specification, using variables from Hardouvelis et al. (1994) and Bodurtha et al. (1995). We include returns on large company U.S. stocks and the excess return on U.S. small company stocks to control for possible U.S. investor sentiment effects on the NAV return, and also the world market return as an explanatory variable. None of these variables add significant explanatory power to the model and there is no qualitative effect of the $PREM_{t-1}$ coefficient estimate.

Table 3 presents the regression results from Eq. (3). Coefficient estimates on the world market return, representing the "beta" of the foreign market return with respect to the world index, are positive and statistically significant for all but five funds. Of the 38 coefficients on the CECF premium, 11 are positive and significant at the 5% or 1% level in a two-tailed test. Under the null hypothesis, we would expect to see only about one of 38 funds statistically significant in the upper 2.5% of the distribution. None of the $PREM_{t-1}$ coefficients are

Table 2
Seemingly unrelated regression of weekly NAV return against the CECF premium, foreign market return, and foreign exchange return, with the CECF premium coefficient restricted across equations, January 1991–March 1997

Fund	Constant	PREM	FMR	FXR	Adj R-Squared
First Australia	0.0012	0.0108**	0.8799**	0.1289	0.6221
Austria	0.0018**	0.0108**	0.7466**	−0.0242	0.6974
Brazil	0.0009	0.0108**	0.6624**	−0.0026	0.6625
Chile	0.0023*	0.0108**	0.7988**	0.2372*	0.7159
France Growth	0.0017**	0.0108**	0.7882**	0.1395**	0.7249
Emerging Germany	0.0009	0.0108**	0.8689**	−0.0151	0.8481
Germany	0.0009	0.0108**	0.9077**	0.0461	0.8165
New Germany	0.0021**	0.0108**	0.7386**	0.1696**	0.7504
Indonesia	−0.0012	0.0108**	0.6140**	−0.0009	0.5920
Jakarta	0.0002	0.0108**	0.5470**	0.0014	0.6313
Ireland	0.0025**	0.0108**	0.7064**	0.1586**	0.7660
Italy	0.0011	0.0108**	0.7533**	0.1233*	0.8115
Japan OTC Equity	−0.0016	0.0108**	0.6215**	0.3478**	0.4259
Korea	−0.0001	0.0108**	0.6943**	0.1928	0.5580
Malaysia	0.0009	0.0108**	0.8902**	0.0516	0.6265
Emerging Mexico	0.0026	0.0108**	0.6643**	0.4872**	0.5240
Mexico	0.0017	0.0108**	0.6781**	0.1123	0.4755
Mexico Equity & Income	0.0041*	0.0108**	0.4708**	0.5730**	0.5164
First Philippine	0.0028**	0.0108**	0.5213**	0.2412**	0.5457
Portugal	0.0020**	0.0108**	0.6602**	0.1942**	0.7274
Singapore	0.0004	0.0108**	0.6026**	0.0876	0.4276
Growth Fund of Spain	0.0024**	0.0108**	0.7782**	0.0203	0.7911
Spain	0.0012	0.0108**	0.7333**	0.1098*	0.6616
Switzerland	0.0004	0.0108**	0.7699**	0.1221**	0.7429
ROC Taiwan	0.0004	0.0108**	0.5790**	0.5387*	0.6700
Taiwan	0.0006	0.0108**	0.5793**	0.3106	0.4667
Thai	0.0010	0.0108**	0.9442**	−0.3155	0.8031
Thai Capital	0.0008	0.0108**	0.8968**	−0.8516**	0.8235
Turkey	−0.0026	0.0108**	0.8264**	−0.0847	0.8341
United Kingdom	0.0025**	0.0108**	0.7809**	0.1654**	0.5982

* Significant at 5%, ** significant at 1% in two-tailed t-test using Newey and West (1987) standard errors with one lag.

negative and statistically significant. Across all 38 funds, the average coefficient on $PREM_{t-1}$ is 0.0218, indicating that if the premium for a particular fund exceeds its in-sample average by 0.05, then the foreign market return over the next week tends to be 0.05(0.0218) = 0.00109 or 0.109% higher than expected.

The results in Table 3 suggest that CECF premiums contain valuable information about future foreign stock market returns. Since few open-end funds specialize in a single country, CECFs are often the most efficient way for individuals to focus their investment in a specific foreign market. If U.S. investors become relatively more optimistic about future earnings or dividends than domestic investors in a specific country, the CECF premium will increase. To some extent, U.S. investors' beliefs or sentiment are confirmed by future foreign market returns. Here, sentiment reflects rational beliefs about future returns rather than irrational waves of optimism or pessimism.

Table 3
Regressions of the weekly foreign market return against the CECF premium and world market return

Fund	N	Constant	PREM	WMR	Adj R-Squared
Argentina	282	−0.0022	0.0363	1.2288**	0.0964
First Australia	481	0.0031	0.0181	0.6497**	0.1798
Austria	388	0.0056*	0.0642**	0.8925**	0.2824
Brazil	267	0.0049	0.0115	1.0948**	0.0379
Brazilian Equity	258	0.0027	−0.0104	1.2053**	0.0480
Chile	387	0.0047*	0.0001	0.1996	0.0061
France Growth	347	−0.0003	−0.0020	0.9743**	0.3908
Emerging Germany	360	0.0009	0.0054	0.9227**	0.3598
Germany	481	0.0012	0.0108	0.9489**	0.3445
New Germany	371	0.0019	0.0109	0.8829**	0.3404
India Growth	220	−0.0101**	0.1014**	0.1458	0.1054
Indonesia	366	−0.0057*	0.0387**	0.1994	0.0258
Jakarta	361	−0.0021	0.0569**	0.2591*	0.0359
Irish Investment	362	0.0056	0.0382	0.9902**	0.3575
First Israel	172	−0.0036	−0.0202	1.0064**	0.0942
Italy	330	0.0022	0.0376	1.0014**	0.1774
Japan Equity	240	−0.0028*	0.0096	1.7524**	0.5291
Japan OTC Equity	350	−0.0040**	0.0310*	1.7029**	0.6279
Korea	481	−0.0021	0.0055	0.5078**	0.0513
Korea Equity	172	−0.0025	0.0440	0.8585**	0.1294
Korean Investment	262	−0.0027	0.0516*	0.5650**	0.0672
Malaysia	481	0.0028*	0.0147	0.8190**	0.2178
Emerging Mexico	234	−0.0007	−0.0172	1.1135**	0.0705
Mexico	450	0.0037	−0.0114	0.9277**	0.0986
Mexico Equity & Income	297	−0.0016	−0.0413	1.0688**	0.0949
Pakistan	168	0.0114	0.1225**	0.1558	0.0810
First Philippine	382	0.0003	−0.0120	0.4050**	0.0310
Portugal	383	0.0007	0.0132	0.5608**	0.1223
Singapore	346	0.0010	0.0054	1.0494**	0.2875
Growth Fund of Spain	366	−0.0025	−0.0153	1.1533**	0.4163
Spain	453	−0.0005	0.0007	1.0751**	0.4001
Switzerland	481	0.0032**	0.0244*	0.8152**	0.3295
ROC Taiwan	409	0.0000	0.0698**	0.7154**	0.0724
Taiwan	481	−0.0030	0.0423**	0.8357**	0.0827
Thai	463	0.0006	0.0159*	0.7059**	0.0891
Thai Capital	354	0.0027	0.0456	0.8577**	0.1040
Turkey	379	0.0007	0.0216	0.5207	0.0132
United Kingdom	481	0.0016	0.0086	0.8460**	0.3990

* Significant at 5%, ** significant at 1% in two-tailed t-test using Newey and West (1987) standard errors with one lag.

There are important differences in $PREM_{t-1}$ coefficients across countries in Table 3. For the more developed markets of Australia, France, Germany, Italy, Japan, Spain, Switzerland, and the United Kingdom, just two of twelve funds have significant positive coefficients. For the eight funds from Latin American markets, including Argentina, Brazil, Chile, and Mexico, none of the coefficients are significantly different from zero. For funds in the emerging Asian markets of India, Indonesia, Korea, Malaysia, Pakistan, the Philippines, Singapore, Taiwan, and Thailand, eight of fourteen funds have significant positive coefficients. On the whole, developed and Latin American markets are far more open to U.S.

investors than emerging Asian markets, with a much wider selection of ADRs available. The more accessible the market, the faster the information of U.S. investors is reflected in NAV, and thus the less informative is the CECF premium in forecasting future returns.

5. Conclusions

Closed-end country funds purchase diversified portfolios of common stocks located in a specific foreign country. This paper examines whether the CECF discount contains valuable information regarding (1) future NAV returns, controlling for foreign market returns, and (2) future returns on the relevant foreign market index.

Because closed-end funds do not redeem or issue new shares to investors on demand at NAV like open-end funds, the CECF premium reflects investor perceptions of the expected future performance of fund managers. All else equal, the higher the perceived future performance of the fund, the higher the premium. We find a positive and statistically significant relation between the premium and future NAV returns, controlling for the contemporaneous foreign market return and exchange rate fluctuations.

Since few open-end funds specialize in a single foreign market, investing in a CECF is typically the most efficient way for an individual to purchase a portfolio of stocks in a specific country. Thus, CECF premiums and discounts provide a measure of U.S. investors' valuation of the stock market in the country. We find that relation between the CECF premium at the end of week t-1 and the week t return on the foreign market is positive and statistically significant for 11 of 38 funds, controlling for the week t return on the world market.

Our results are important for the individual investor in a couple of ways. First, we confirm previous findings that CECF discounts provide information about the future investment performance of the fund, controlling for the foreign market return and exchange rate fluctuations. A fund with a large discount is not necessarily a bargain, because its future NAV returns can be expected to lag behind its respective market. Second, this is the first paper to show that the CECF discount forecasts the return on the underlying foreign market. Large discounts are associated with relatively low returns on the foreign market, controlling for the world market return. This is especially true in Asian markets, which are less open to U.S. investors than many other markets. CECF premiums and discounts at least partially reflect rational assessments of the future performance of both the home market and the fund manager, not simply pricing errors caused by irrational investor sentiment.

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