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## Early Reporting Effects on MSCI Hedge Fund Index Returns

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Abstract

Considerable research has been conducted on how the timing release of corporate financial and investment information impacts performance measurement. Accounting research has found that firms which report early in the reporting cycle generally report higher performance than firms which report late in the reporting cycle. Academic research has also found that in certain Barclay Group indices, hedge funds and Commodity Trading Advisors (CTAs) who report returns early in the monthly reporting cycle often have returns greater than similar funds which report later in the monthly reporting cycle.

In this article, we attempt to expand upon previous work conducted on the Barclay Group hedge fund indices by comparing the relative performance of hedge funds who report to the MSCI hedge fund indices. Our analysis consists of comparing the average return of early reporting funds with the expected average return of funds later part of the reporting cycle. If no early reporting effect exists, there should be no statistically significant difference between average early reporting returns and average late reporting returns. We find that for the more liquid and thus easier priced strategies, there appears to be evidence that earlier reporting funds exhibit better performance on average than late performing funds.

# **Early Reporting Effects on MSCI Hedge Fund Index Returns**

## **Introduction**

Considerable research [Sengupta, 2004] has been conducted on how the timing release of corporate financial and investment information impacts performance measurement. Accounting research has found that firms which report early in the reporting cycle generally report higher performance than firms which report late in the reporting cycle. Similarly, research [Penman, 1987] has indicated that firms which report earnings numbers early in the reporting cycle often report earnings greater than expected while firms which report earnings late in the reporting cycle often report earnings less than expected.

Furthermore, empirical research [Agrawal and Tandon, 1994] indicates that equity returns in the first half of a month are greater than equity returns the second half have, in part, been linked to the expectation that early reporting firms often wish to provide positive information as early as possible, while firms experiencing poor performance often wish to delay publication with the hope that something might occur that will offset the expected negative impact of the release. Recent academic research [Schneeweis, Spurgin and Waksman, 2006] has also found that in certain Barclay Group indices, hedge funds and Commodity Trading Advisors (CTAs) who report returns early in the monthly reporting cycle often have returns greater than similar funds which report later in the monthly reporting cycle.

In this article, we attempt to expand upon previous work conducted using the Barclay Group hedge fund indices by comparing the relative performance of hedge funds who report to the Morgan Stanley Capital International (MSCI) hedge fund indices. Our analysis consists of comparing the average return of early reporting funds with the expected average return of funds later part of the reporting cycle. If no early reporting effect exists, there should be no statistically significant difference between average early reporting returns and average late reporting returns. We find that for the more liquid and thus easier priced strategies, there appears to be evidence that earlier reporting funds exhibit better performance on average than late performing funds.

## **Data and Methodology**

Hedge fund indices published by MSCI are used to demonstrate the differences between early reporting estimates and final returns. Fund returns are reported to MSCI in the following month, thus allowing individual funds time necessary to properly calculate returns. Each month, MSCI provides an early estimate (typically during the second week of the following month) of the previous month's returns by strategy based on reporting managers. Near or during the final week of the following month, MSCI provides a final return of the previous month's hedge fund indices.

Exhibit 1 below depicts the MSCI hedge fund indices that provide early and final reporting estimates. We do not have the sets of managers (those reporting both before and after the estimate) which report into the indices. MSCI discloses the percentage of funds that report at the time of the early estimate. We use the early and final reporting data for the MSCI hedge fund indices for the period January 2004 through December 2005 in our study.

## Exhibit 1: MSCI Hedge Funds Indices

MSCI Hedge Fund Indices	
Early Reporting Hedge Fund Indices	Final Reporting Hedge Fund Indices
Hedge Fund Composite Index - Equal Weighted	Hedge Fund Composite Index - Equal Weighted
	Hedge Fund Composite Index - Asset Weighted *
Directional Trading Index	Directional Trading Index
Relative Value Index	Relative Value Index
Security Selection Index	Security Selection Index
Specialist Credit Index	Specialist Credit Index
Multi-Process Group Index	Multi-Process Group Index
	Hedge Fund Equity Index
	Hedge Fund Fixed Income Index
	Hedge Fund Diversified Index
	Hedge Fund Developed Markets Index
	Hedge Fund Emerging Markets Index
	Hedge Fund Global Markets Index
	Hedge Fund Europe Index
	Hedge Fund North America Index
	Hedge Fund Japan Index
	Offshore Hedge Fund Composite Index
	Onshore Hedge Fund Composite Index

\* With exception for the asset weighted hedge fund composite index, all other hedge fund indices are equal weighted

Our analysis will focus on the differences between early and later intramonth estimated returns Consistent with previous research [Schneeweis, Spurgin and Waksman, 2006], by using the percentage of funds reporting early, we can estimate the late intramonth estimated average return of the managers reporting in the latter part of the month where the final return of the entire sample equals the reported final value. To compute the estimated average return of late report managers we assume 100% of funds have reported to their respective index by the finalized return report.

## Empirical Results

### Early Versus Late Reporting Average Returns: Tests of Significance

Exhibit 2 below shows the average return performance of funds that report both in the early and later parts of the reporting cycle for the MSCI hedge fund indices. Except for the Specialist Credit Index, we find that each of the hedge fund indices have early estimate returns greater than late estimate returns during our sample period. Exhibit 3 depicts the monthly differentials between early reporting returns and late reporting returns.

### Exhibit 2: Average Returns of Indices before and after Estimates are Calculated

Index (Jan/04 - Dec/05)	Average Return Before Estimate is Calculated	Average Return After Estimate is Calculated	Difference Between Average Before Estimate and Average After Estimate
MSCI Hedge Fund Composite Index	0.64%	0.59%	0.04%
MSCI Directional Trading Index	0.43%	0.21%	0.21%
MSCI Relative Value Index	0.22%	0.22%	0.00%
MSCI Security Selection Index	0.85%	0.67%	0.18%
MSCI Specialist Credit Index	0.75%	1.00%	-0.24%
MSCI Multi-Process Group Index	0.82%	0.70%	0.12%

**Exhibit 3: Difference between Average Index Returns (Estimate) and Average Index Returns (Final), January 2004-December 2005**

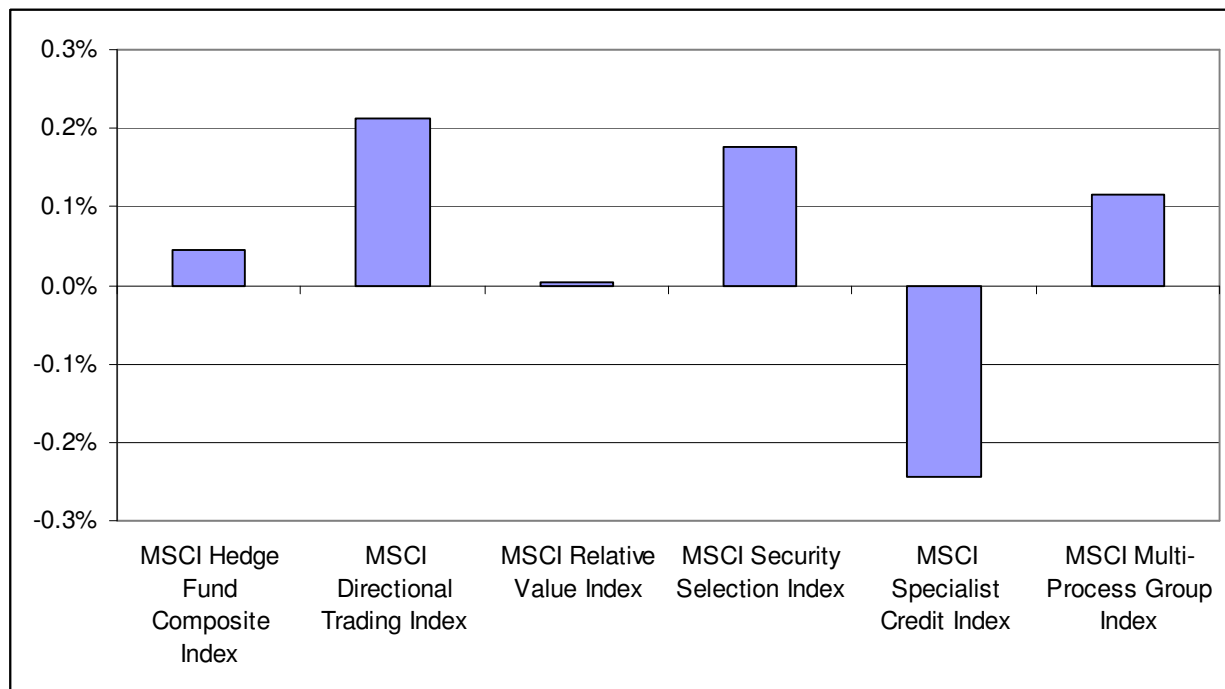


Exhibit 4 below shows that on average between 57% and 69% of reporting hedge funds provided their returns to MSCI for calculation into the early reporting index estimates from January 2004 to December 2005. We find that the percentage of months where the early reported average returns exceeds the late reported average returns ranges from 45.8% (MSCI Relative Value and Security Selection Indices) to 79.2% (MSCI Hedge Fund Composite Index). This would suggest there is a preponderance of better performing funds to report earlier than poor performing funds.

We also find the average differential between early and late reporting average returns to be minimal. Our finding suggests that funds reporting early into the MSCI Hedge Fund Composite Index are apt to post higher average returns compared to the average returns of late reporting funds with statistical significance at the 95% confidence level. The MSCI Security Selection Index suggests that a reporting relationship exists at the 90% confidence level while the MSCI Directional index also suggest statistical significance with a p-value of 10.7%.

**Exhibit 4: Summary Statistics of Hedge Fund Indices**

Index (Jan/04 - Dec/05)	Avg Percent of Funds that Report Early	% of Months where Early Return > Late Return	Avg Monthly Differential (Early minus Late)	Stdev of Diff Return	T-Statistic	P-Value
MSCI Hedge Fund Composite Index	61.8%	79.2%	0.04%	0.09%	2.41	2.4%
MSCI Directional Trading Index	68.5%	72.0%	0.21%	0.62%	1.68	10.7%
MSCI Relative Value Index	63.8%	45.8%	0.00%	0.27%	0.05	96.0%
MSCI Security Selection Index	59.3%	58.3%	0.18%	0.43%	2.00	5.8%
MSCI Specialist Credit Index	57.4%	45.8%	-0.24%	1.00%	-1.20	24.4%
MSCI Multi-Process Group Index	58.9%	58.3%	0.12%	0.63%	0.90	37.7%

While some indices show a statistically significant relationship that suggests early reporting funds incur higher average returns than late reporting funds, we do not find this to be the case with the Relative Value, Specialist Credit and Multi-Process Group indices. Part of this difference could be attributed to the underlying liquidity of the positions within the funds which make up these indices. The MSCI Directional Trading index is comprised

of funds whose strategies typically involve taking positions in commodities, currencies, equities, and bonds in the cash and futures markets. The MSCI Security Selection Index consists of funds that engage in long bias, short bias, no bias or variable bias strategies, primarily through equity-based positions. The MSCI Hedge Fund Composite index is an aggregated index intended to be representative of the overall hedge fund universe. Relatively liquid strategies such as equity long/short make up the majority of funds in the hedge fund universe. We expect these same liquid strategies to account for a significantly large proportion of funds that comprise the hedge fund composite index.

In contrast, the indices that show no statistically significant tendency to report positive performance early in the reporting cycle engage in strategies which are less liquid. The MSCI Relative Value Index consists of funds who engage in various arbitrage strategies, which in cases such as merger arbitrage strategies may be more difficult to price. The MSCI Multi-Process Group Index is made up of funds that tend to focus on event driven strategies and often undertake merger arbitrage and distressed securities positions.

The MSCI Specialist Credit Index is comprised of funds that take positions in less liquid distressed securities and private placement instruments. Interestingly, we find a particularly large deviation of 4.05% between the early and late reporting return estimates for the Specialist Credit index in July 2005 as seen in the appendices exhibits. It is difficult to attribute the specific cause for such a difference given the limited visibility of the underlying funds that report to the index. However, it is worth noting that in May 2005, Standard and Poor's cut the credit ratings on both Ford Motor Company and General Motors Corporation to junk status and could potentially contribute to such differences.

Since the MSCI Hedge Fund Composite, Directional Trading and Security Selection indices are typically comprised of funds whose underlying positions are more liquid; these fund managers are better capable of determining whether to withhold their return results for later in the reporting cycle. This suggests that these funds have an ability to report positive performance early in the cycle and hold poor returns for later in the cycle.

## **Conclusions**

Managers have an incentive to time the release of their performance information. If they perform relatively well in a given month, one may expect them to report their returns sooner than usual in that month. In contrast, if they perform poorly, they may delay reporting with the expectation that current events may offer a better picture of their performance. In fact in certain cases managers may delay reporting until the following month's returns are available in order to offset the negative impact of the previous month's returns.

Our results show that consistent with the actual reporting cycle for certain hedge fund strategies; poorly performing managers in general delay reporting their returns. In particular, we find that those funds that report higher average returns early in the reporting cycle, tend to be the those strategies which can be priced easier thus giving the manager the time to discern whether he or she would prefer to submit their results earlier or later in the reporting cycle.

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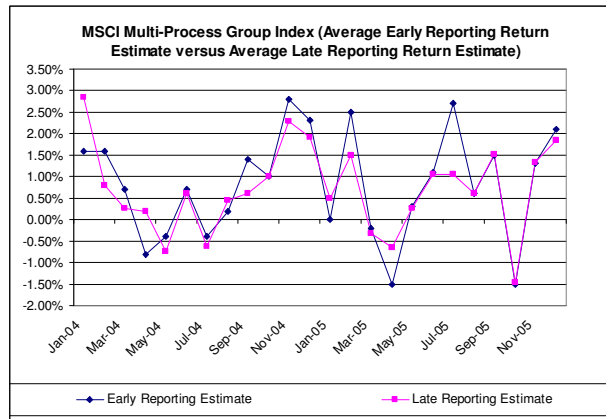
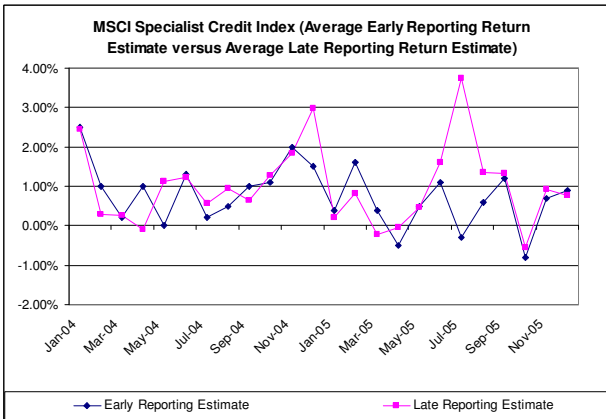
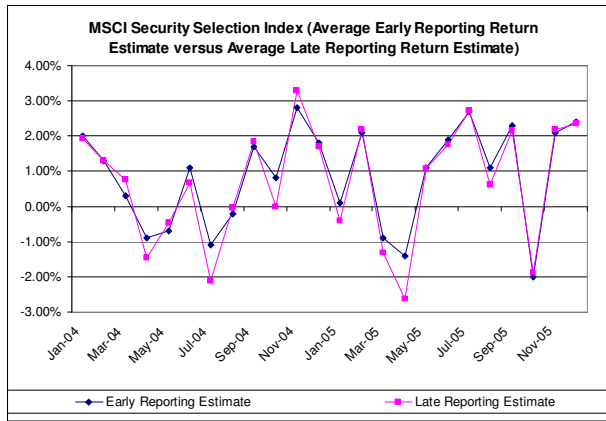
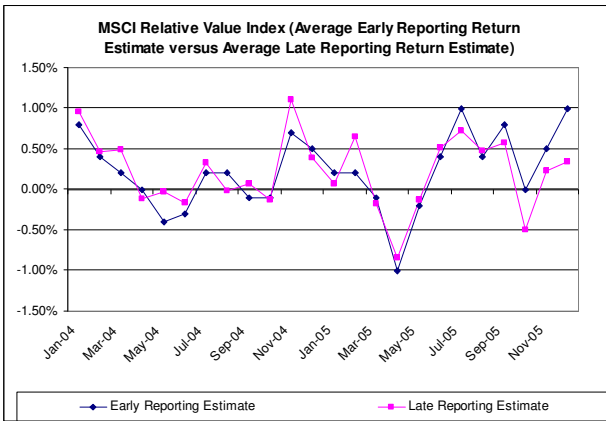
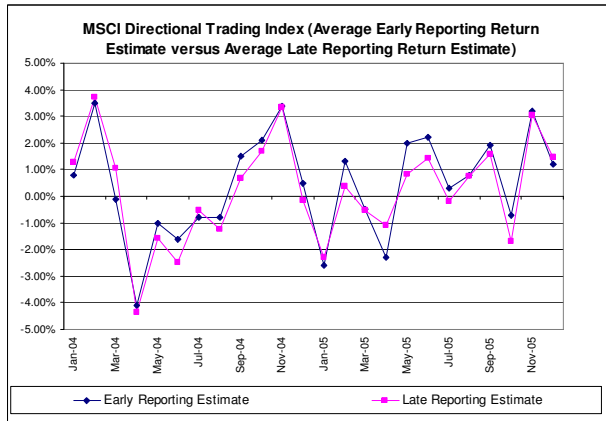
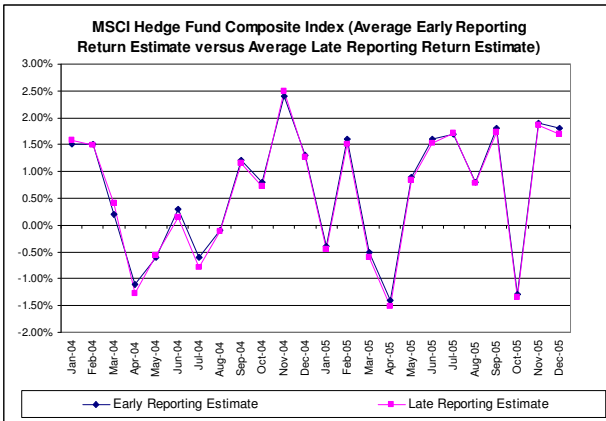
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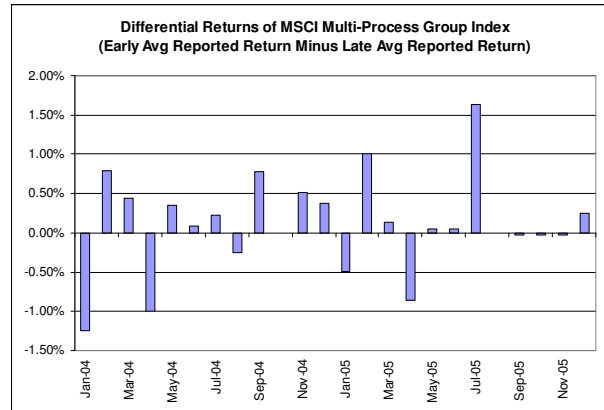
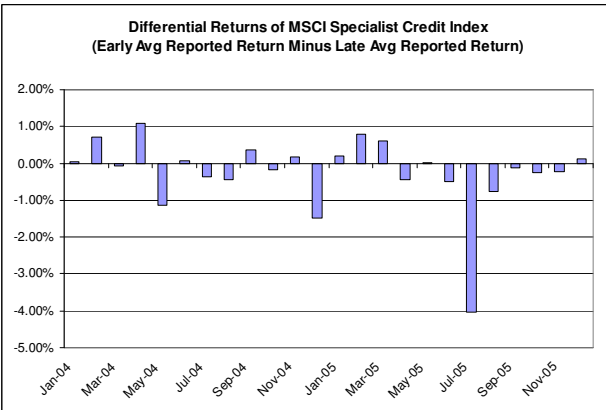
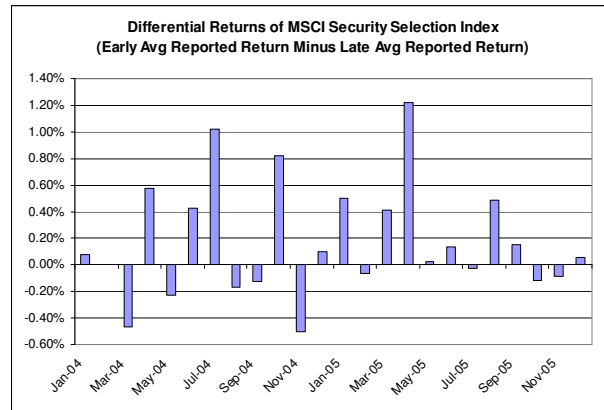
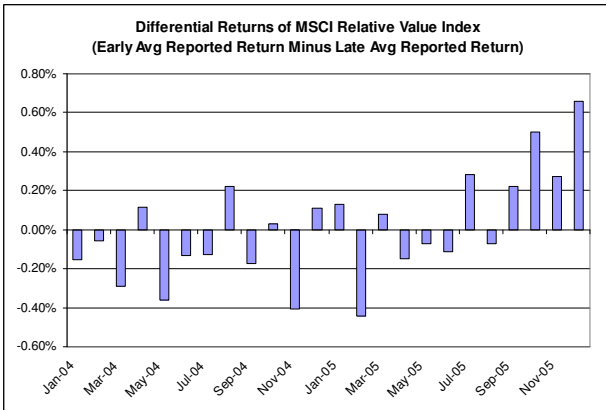
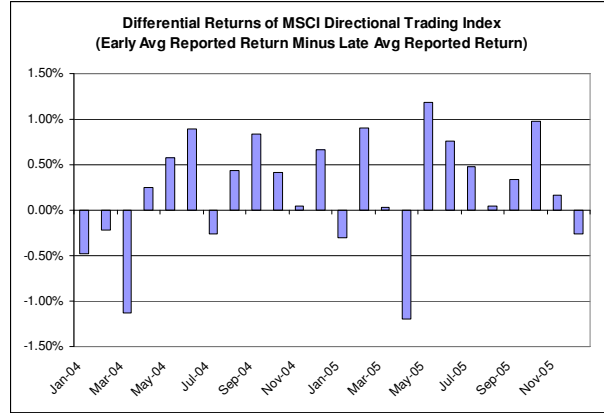
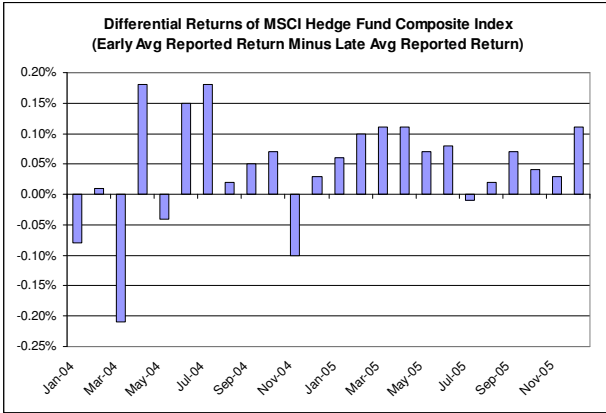
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# Appendix I: Early Versus Late Reporting Average Returns



## Appendix II: Differential Returns of MSCI Hedge Fund Indices



# Appendix III: Ranked Returns of MSCI Hedge Fund Indices

