

Introduction

Recently investors have been asking for increased transparency from hedge fund managers. Specifically they are looking for ways to better understand the portfolio risks, and the sources of fund profits.

Similarly, the ability of a fund manager to monitor and analyze performance across factors such as strategy and sector contributes to improved investment decisions. Prompt feedback on performance can be important as markets change and strategies need to adapt.

The purpose of this paper is to highlight best practices and the benefits of profit attribution. Examples of reports generated by the SGGG Portfolio System are shown, illustrating the effectiveness of timely daily and monthly reporting. This data will then be used to create part of a sample investor report.

Fund Internal Reporting

The Portfolio System captures details about each trade and security and can report on profit using a variety of factors. Figure 1 below shows a profit attribution report with breakdown by sector. Profit is shown for Individual position, with aggregated totals for each sector as well as for the whole portfolio. Potential factors which can be used are:

- **Security level:** Monthly profit on individual security positions can be combined with reporting by other factors. All the reports provide security position level detail for any of the chosen factors.
- **Sector:** Analyze profit & loss by sector or industry
- **Currency:** Sorting profit & loss by currency when the fund has holdings in more than one currency.
- **Owner:** Evaluate the contribution of a particular analyst or portfolio manager.
- **Strategy:** Measure how different strategies are performing from month to month.
- **Trades and Positions:** Monitor the long term contribution of individual trades or positions. Managers have the ability to track and see aggregate performance for a 'trade group', such as a long position in stock with short exposure through options.

Reports can be run at any time during the month, and will reflect month-to-date performance attribution.

SECTOR	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08	Jan 09	Feb 09
CONSUMER STAPLES	2	2	0	-114	0	1	5	-12
ENERGY	-99	-191	-311	-397	-201	-92	-200	-48
FINANCIALS	123	-25	111	-66	93	-43	-181	16
HEALTH CARE								5
INDUSTRIALS	5	19	0	-183	-26	12	-52	-2
INFO TECHNOLOGY	17	107	-196	-323	-56	-32	-262	-103
MARKET HEDGE	35	281	844	815	167	-40	12	216
MATERIALS	-60	-272	-430	-478	315	23	-41	82
AGU.TO	-27	-56	-150	-81	76	2	154	79
CS.TO							-3	5
HF.TO	-22	-148	-115	-137	22	-82	-102	-11
K.TO		-3	-10	-35	-6	-2	8	6
K.WT.B								2
MOS	-3	-14	-32	-85				
NBD.TO	6	11	27	77	64	-48	81	38
POT.TO	-14	-62	-149	-217	159	152	-179	-38
UTILITIES	-21	-41	-40	-60	-10	-17	-21	20
TOTAL	2	-121	-23	-806	281	-189	-739	174

Figure 1 Profit attribution by sector with detail of Materials sector in Basis Points

Investor Reporting

Performance information should be made available to investors to allow them to understand how an account has performed...

AIMA Canada Guide to Sound Practices for Canadian Hedge Fund Managers

Investors should assess the manager's ability to operate a fund successfully in varying market environments.

President's Working Group on Financial Markets Principles and Best Practises for Hedge Fund Investors

Many investor due diligence requirements can be satisfied with effective reporting of fund performance. These include:

- **Style Drift:** Consistent performance attribution over time will help confirm that the fund's stated strategy is being followed, and if the fund investment style has changed.
- **Understanding Performance:** Proper reporting of the factors that contributed positively or negatively to the fund's performance (sectors, strategies, etc) enables investors to see the source of past returns.
- **Understanding Risk:** An understanding of where profit and loss has been generated contributes to the full understanding of the risks associated with the investment, especially when combined with exposure weights. For example, a portfolio where there are multiple sources of profit may be less risky than one where all the profits come from a single sector or strategy.

The standard and customized historical attribution reports produced by the system can meet the needs of investors and save many hours of data manipulation.

Generating reports using the Portfolio System

The SGGG Portfolio System can assist managers in creating standard monthly reports for investors. The example attribution report in Figure 1 shows attribution displayed by sector and Figure 2 and 3 below display the portfolio grouped by currency and strategy.

CURRENCY	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08	Jan 09	Feb 09
CAD	-64	19	-9	-440	152	-158	-709	154
USD	66	-139	-14	-366	129	-31	-30	20
TOTAL	2	-121	-23	-806	281	-189	-739	174

Figure 2 Profit attribution by currency in Basis Points

STRATEGY	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08	Jan 09	Feb 09
EVENT DRIVEN	1	8	10	-63	-140	-23		
FUNDAMENTAL VALUE	90	91	-229	-400	-167	181	112	144
GROWTH	-36	-145	-329	-513	242	12	-530	-281
MARKET HEDGE	35	281	844	815	167	-40	12	216
SECTOR ROTATION	-88	-114	-318	-645	180	-319	-333	95
TOTAL	2	-121	-23	-806	281	-189	-739	174

Figure 3 Profit attribution by strategy in Basis Points

The system can also report on monthly returns for different investor series. For the sample portfolio, the Gross and Net (after management and performance fees, etc) returns for the portfolio and its benchmarks are calculated. Statistics such as standard deviation and Sharpe ratio are calculated for each series, as are measures relative to the chosen benchmarks including beta and information ratio. Figure 4 shows only the monthly returns for 2009, but the data from prior years is also available.

Series	Return Jan 09	Return Feb 09	Return YTD	Cumulative S.I.	Annualized S.I.	Standard Deviation	Sharpe Ratio	Benchmark	Correl	Beta	Info Ratio
CAN L/S GROSS	-7.39	1.74	-5.78	-13.85	-20.03	13.75	-1.82	S&P TSX	0.27	0.18	1.73
CAN L/S NET	-7.31	1.67	-5.76	-14.23	-20.57	13.74	-1.87	S&P TSX	0.27	0.18	1.69
S&P TSX	-3.26	-6.58	-9.63	-43.85	-57.93	21.13	-2.98				

Figure 4 Estimate of portfolio net returns in Percent

Figure 5 shows an example created using data from the SGGG Position System - by including exposure as well as profit attribution. Reporting exposure to investors is a key component in disclosing risk. Exposure is calculated in real time in the Portfolio System using market values and delta equivalents for option positions.

	Fund Exposure			Return (%)
	Long (%)	Short (%)	NET (%)	Feb 2009
SECTOR				
CONSUMER STAPLES	3.2	0.0	3.2	-.12
ENERGY	31.2	9.7	21.5	-.48
FINANCIALS	8.9	0.0	8.9	.16
HEALTH CARE	0.9	0.0	0.9	.05
INDUSTRIALS	12.5	0.0	12.5	-.02
INFO TECHNOLOGY	41.2	6.8	34.4	-1.03
MARKET HEDGE	0.0	51.7	-51.7	2.16
MATERIALS	30.4	8.3	22.1	.82
UTILITIES	14.0	0.0	14.0	.20
CURRENCY				
CAD	106.3	62.1	44.2	1.54
USD	36.0	14.4	21.6	.20
TOTAL	142.3	76.5	65.8	1.74

Figure 5 Fund exposure and profit at month end February 2009 in Percent

Conclusion

The SGGG Portfolio System assists managers in understanding and reporting fund performance. The system calculates performance estimates and profit attribution, highlighting investment style, the strategies used and the source of returns. Internally, position level attribution is a valuable tool in managing and monitoring the investment process.

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