**INV PHILOSOPHY**

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| The investment objective of the ROW Diversified Program is to seek to generate consistent long-term appreciation through active leveraged investing in global futures, forwards, and options markets. The objective is to generate positive absolute return that has low correlation to other asset classes. We utilize a quantitative approach to forecasting, portfolio construction, and risk management. The Program invests in currency, interest rate, energy, agriculture, and equity index instruments. We achieve style diversification by using a combination of Carry, Trend, Fair Value, Pattern Recognition, Volatility, Sentiment, and Mean Reversion models.  We believe our edge is our experience, continuity and diversification. The founders worked together for 17 years before starting ROW. ROW has an ongoing academic affiliation: Ryan serves on the Industry Advisory Board for the UCLA Masters of Financial Engineering (MFE) Program. ROW trades a wide variety of styles, across a wide range of liquid, transparent, actively traded asset classes. Comprehensive systematic risk management is overlaid on the strategies, at multiple levels. And at the end of the process is human oversight—a “reality check” applied during periods of market dislocation. |
| **INV PROCESS**  The Partnership will invest in a portfolio of futures, forward contracts and options in: Developed and emerging market currencies, sovereign interest rates, energy, agriculture/softs, and equity indices.  Financial instruments may be added to, or deleted from, this list at any time, and the Partnership may not have positions in some of these instruments at any given time.  Financial and commodity markets are driven by a number of factors, including, but not limited to, the following: (i) interest rates, both absolute and relative differentials between countries; (ii) cost of carry (physical commodities); (iii) long-term cyclical economic factors; (iv) short-term event-driven factors; (v) inflation rates, both absolute and relative differentials between countries; and (vi) short-term volatility, commonly referred to as “noise.”  Trend – All Markets  Long-term cyclical factors and short-term event-driven factors combine to create the appearance of trends in financial and commodity markets. The decline of the U.S. dollar from 2002 to mid-2008 was a long-term factor (the existence of significant budget and trade deficits), while the sharp rise in the U.S. dollar in the second half of 2008 was a short-term event-driven factor (the occurrence of a sharp liquidity crunch). When these factors are present, they create persistent behavior in the markets they affect, behavior that can be exploited by quantitative trend-following models. The critical elements to understand are how trends start, how they end, and how to find the "signal" in the presence of other "noise" factors.  The trend-following component of the Partnership’s investment approach will be derived from signal processing methods, which are most commonly used in electrical engineering. The key trade-off in digital filter design is the balance between edge correction and delay. In layperson's terms, the surer you need to be that a trend has started, the later you will enter the trade. Since the Partnership will aim to exploit factors in two different time frames, the short- and long-term, the Partnership will need to employ distinct sets of filters. The Partnership’s short-term models are intended to react quickly to the beginning and ending of a short-term trend, because the General Partner does not consider trend to be a steady-state component of currency price action. Long- and short-term persistent factors wax and wane in importance, and the Partnership’s models are intended to work in this dynamic environment.  To capture long-term trends, timing is not as critical. The Partnership will therefore attempt to eliminate noise at the expense of missing the beginning of a new long-term trend. Since the Partnership’s approach will be purely quantitative, the Partnership will risk "finding" a long-term trend that is not really there. The attention to noise-reduction of the Partnership’s long-term filters is intended to assist in minimizing the occurrence of this error.  Note the difference in emphasis of the two classes of filters—in the short term, the Partnership will be most concerned with false negatives, while in the long term, the Partnership will be most concerned with false positives. One factor that leads to short-term trends is "flight to quality," which may harm the Partnership’s carry positions. It is therefore important that the short-term trend model is biased toward action.  It should be noted that trend, at times, will be the dominant strategy in the portfolio. It is therefore possible that our aggregate position can have a negative carry.  Carry – Currency Markets  A currency forward is an agreement to exchange currencies at a specified price, at a specified future date. The forward price contains a discount or premium relative to the spot price, which is driven mainly by the interest rate differential between the two countries. Therefore, "selling" U.S. dollars versus Australian dollars is essentially equivalent to borrowing U.S. dollars and lending Australian dollars. Currency trades done specifically to capture yield differentials between countries are known as carry trades. As with any forward currency position, there is exposure to volatility in the spot market as well as volatility in interest rate differentials. The Partnership intends to limit the duration of its trades to less than twelve months in attempt to limit its interest rate risk. The Partnership will focus on the risk/reward relationship between interest rate exposure and the resulting spot market exposure. The Partnership will use quantitative models to design trades that aim to exploit this relationship. The Partnership’s models will compose "clusters" of currencies that are intended to outperform simple "pair" trades on a risk/reward basis. An example of a currency cluster is long a basket of Mexican Peso and Brazilian Real vs. short a basket of U.S. Dollar and Canadian Dollar. Also critical to the Partnership’s investment approach will be a battery of quantitative methods for estimating future spot market volatility.  Carry – Physical Commodities  Future delivery of physical commodities will trade at a discount or premium to the spot price, based on supply/demand factors and storage costs. Carry strategies seek to go long markets in “backwardation,” and short markets in “contango.” Backwardation means the future price is lower than current spot, and contango means the future price is higher than current spot. The strategy is profitable when future rates converge to spot rates. The Partnership will focus on the risk/reward relationship between convergence yield and the resulting underlying market exposure. The Partnership will use quantitative models to design trades that aim to exploit this relationship. The Partnership’s models will compose "clusters" of commodities that are intended to outperform simple "pair" trades on a risk/reward basis. Also critical to the Partnership’s investment approach will be a battery of quantitative methods for estimating future market volatility.  Inflation – Currency Markets  Inflation rate differentials between countries drive foreign exchange rates in an intuitive way. If Country A has 10% annual inflation while country B has no inflation, one would expect their exchange rate to move 10% per year to adjust for the changing rate of purchasing power in the two countries.  RPP modeling will act as a balancing force to the Partnership’s carry and trend models. Note that both carry and trend are self-reinforcing factors, while RPP is a mean-reverting factor. When carry, trend, or a combination of the two forces pushes exchange rates far away from their equilibrium level, the RPP model may have a bigger influence in the Partnership’s overall portfolio, thereby lessening the Partnership’s risk if a reversal in trend or carry does occur.  Mean Reversion/Options Overlay – All Markets  Mean Reversion strategies attempt to profit from short-term volatility. It is the inverse of the trend strategy – rather than eliminate noise to trade the signal, we are attempting to eliminate signal and trade the noise. We exploit noise explicitly by taking short term positions (1-4 days) against recent price action, or implicitly by selling short-dated options that will be profitable if prices stay in a range (i.e. price action dominated by noise).  Portfolio Construction  The simplest way to construct a portfolio is to take all potential trades and allocate an equal share of capital to each. The problem with this “maximum entropy” approach is that it ignores available information, including that: (i) some trades have stronger forecasts than others; (ii) some trades are riskier than others; and (iii) trades are related to each other in ways that can augment or degrade overall diversification.  None of this information is known, but it can be estimated. The question is, how much of this estimated information should be used, and with how much emphasis? Proponents of global optimization, an approach the Partnership does not intend to employ, would answer "all of it" and "a lot." In the General Partner’s view, an issue with global optimization is that it takes inputs as facts rather than as estimates that may or may not be correct. As a result, the optimizer has an inherent bias to choose trades that have been estimated incorrectly. Consider a trade with a true expected return of 5% annualized that has been estimated at 10% annualized. A global optimizer will push weight to this trade. Consider a trade with risk of 12% annualized that is estimated at 6%. Again, a global optimizer will push weight to this trade. Since global optimizers are looking to construct the best possible expected return portfolio, a few errors of this sort can result in a portfolio highly concentrated in the trades with the most incorrect estimates.  Much research has been done in recent years to combat the overconcentration and error-bias problems of global optimization, and it is generally recognized that optimizers constrained in this way do outperform their unconstrained counterparts. The General Partner believes, however, that this line of research has not and will not sufficiently refine global optimization to make it the most effective portfolio construction strategy. In addition, the layering of smoothing algorithms on top of a complex system makes it hard to know how the process will function if an extreme event occurs.  The Partnership’s approach to portfolio construction will be to "build locally, evaluate globally." As discussed earlier, the Partnership intends to make localized forecasts on small clusters of assets.  Trade size will be adjusted by the forecast strength and estimated volatility of each cluster. The clusters themselves will be built with estimates of correlation between the component assets. Beyond that, the Partnership intends to employ the maximum entropy approach of simply combining all of the candidate trades to form the Partnership’s portfolio. The Partnership’s intended approach offers the complexity of an optimized solution with a substantially reduced exposure to estimation error.  Average trade size = ~2% of AUM.  RT per million per month ~65  Typically we have ~50 positions open at any given time.  The percentage of risk invested in any single market is <10%, from a VAR standpoint. We have concentration limits on individual markets, but this number is more a function of the number of markets we trade and the variety of strategies.  We maintain positions in almost every market at all times, because of the number of distinct strategies we employ and our cluster (multivariate) approach.  ROW Diversified =1000 round-turns traded per $1million per year  Average annual commission: ~ 60bp for ROW Diversified. This has not varied much. As AUM grows, commission rates should drop, as we can negotiate more favorable R/T rates.  50-75 trades in each market per year. These are typically small adjustment trades to the overall position. Trading frequency tends to increase during unprofitable periods.  We would expect there to be a roughly equal number of winning and losing trades, with winning trades lasting longer and generating more profit than the losses received on losing trades.  The average holding period is more dependent upon strategy than winning/losing. Trend trades tend to be held for 2 weeks to 2 months, with winning trades lasting longer and losing trades shorter. Yield and relative value trades can be held longer, even if losing, as they are part of a carefully constructed portfolio. Mean reversion trades tend to be 2 weeks or less.  Positions are continuously adjusted on a daily basis. It is common for winning positions to be added to or subtracted from – same with losing positions. The portfolio appears to “flow” over time. The individual positions are, however, limited in size by our risk limits.  Trend Following: 45%  Carry/Roll Yield: 25%  Pattern recognition: 10%  Countertrend: 10%,  Relative Value: 10%  The goal is to mix the strategies to minimize our maximum regret. In a game-theory-optimal sense, we are positioning our strategies so that we are not dependent on a particular market environment to perform well.  Trend/Momentum: 2 weeks to 2 months  Pattern recognition: 1-2 weeks  Carry / Roll Yield - INVARIANT  Fair Value – 3-6 months  Volatility – 1 week to 1-month  Mean Reversion – 2-5 days  Moving average of prices  Breakout systems  Momentum oscillators  Spread relationships  Statistical probabilities  Overbought/oversold indicators  All elements of the investment process are considered to be in development at all times. Part of the research process is to augment existing systems as well as develop new systems.  Approximately equal time is focused on developing new trading systems and further refining the existing trading systems.  Changes to market sectors are infrequent - small adjustments, once or twice a year.  We are firm believers in the Adaptive Market Hypothesis and as such, we believe the best way of achieving a consistent level of expected returns is to adapt to changing market conditions through consistent research and model updates/upgrades.  Our trading systems are under constant review, but changes are not that frequent. Changes to the trading systems will start with an intuitive belief that a given system is lacking – typically, we will consider a hypothetical scenario and test whether our systems would behave as anticipated through such a scenario. If we have an algorithmic solution, we will test this idea, using the standard K-fold validation and other anti-overfitting techniques to confirm the benefit of the addition. Then we present the change, with “before” and “after” statistics and scenarios, to the Investment Committee (currently Jeff Weiser and Ryan O’Grady). If the change passes this level, it is “side-implemented,” where we run live side-by-side with and without the change for a period of time to ensure the change was implemented properly. Then we merge the runs and the change becomes part of the system. As far as retiring an existing rule, the process would be the same.  All investment ideas must have an intuitive appeal. The key to proper quantitative modelling is to have a prior belief of the framework of the system. We do not believe in “non-parametric” modelling of financial time series. Above that, we use a variety of safeguards to prevent over-fitting of back-tested results, such as K-fold validation, cross-market validation (i.e. an idea that works in one market should work in all similar markets), withheld data, and “double-spread” stress tests (i.e. how would the model respond to a shock in bid/offer spreads available).  Filters are used to size trades, but not to select trades. An example of a filter would be a volatility filter for carry (low/declining vol is better).  Equities are limited, and precious metals are excluded. They do not give us the full complement of strategy diversification. (THIS IS CHANGING IN NEXT UPDATE)  We run our models once per day, at a time when all the markets we trade are open and liquid. Currency markets trade 24 hours per day, and all of the futures markets we trade have after-hours electronic trading.  Jeffrey Weiser and Ryan O’Grady are the only authorized traders.  Jeffrey Weiser is the primary trader. Mr. Weiser handles all execution responsibilities as well as rolls. Ryan O’Grady is the secondary trader.  Trade blotters are prepared by our systems and uploaded to our trading platform. But, human oversight and intervention is required to execute the orders – we do not use algorithmic execution. One of our key competencies is executing with minimum or even negative slippage (relative to market levels at the time the signals are generated). Open orders can be seen on screen and are monitored visually.  The trade process begins with collection of spot, forward, commodity and economic rates at set times throughout the day. These rates are processed through ROWAM’s proprietary model suite and buy/sell signals are generated. These signals are then bundled and applied to each fund’s trading level resulting in actual trading amounts. Bulk trading amounts are submitted to trader for execution.  All trades done at ROW are executed electronically (for virtually all futures) or verbally (as required for FX forwards - Interbank requires text-based or verbal transmission of the orders) with counterparties so that there is no discernible difference between on-site trading and off-site trading. ROW’s virtual computing environment ensures access to computers in the Newport Beach office or the DR site in NY at all times. Counterparty trades are immediately reflected at the Prime Broker and FCM’s websites. Verification and acceptance of trades is done through these sites and could be done verbally if site access is unavailable. Automated reconciliation of trade reports from Prime Brokers and FCM is done on a daily basis.  We have considerable experience managing market impact, but it is not a concern at current or near-term likely AUM.  For currency, all trades are submitted to ROWAMs prime-brokers by counterparty banks. Details are also submitted to ROWAMs back-office from the ROWAM traders. Both sides are electronically matched and accepted. Any breaks are reported and resolved same-day.  For commodity products, all trades are executed electronically and flow automatically to ROWAM’s FCM. Details are also submitted to ROWAMs back-office from the ROWAM traders. Back-office personnel check price executions against FCM statements T+1. Any breaks are reported in that time frame.  For both products, ROWAM maintains an algorithmic position reconciliation program to check total and individual positions against expected positions. In addition, positions are reviewed by traders and back-office personnel daily. Statements are reconciled T+1.  Most of our models yield a continuous output (as opposed to long/short, which is binary), so with position rounding it is possible to have a 0 position.  Positions are continuously adjusted on a daily basis. It is common for winning positions to be added to or subtracted from – same with losing positions. The portfolio appears to “flow” over time. The individual positions are, however, limited in size by our risk limits.  Methods used to close out profitable positions include: Trend reversals, Overbought/oversold indicators, Volatility, Price patterns, Spread relationships, and Change in fundamentals.  Our goal in asset selection is diversification. We strive to include as many markets as possible, given liquidity requirements. Bid/offer spreads are closely monitored in all markets we trade – waning liquidity is a reason to remove an asset from consideration in the portfolio. |

**RISK MGMT**

Ryan O'Grady and Jeffrey Weiser are responsible for risk management.

Risk management is evaluated globally. The first consideration is the desired output of the Partnership’s portfolio construction process. The Partnership will work from the bottom up, starting at the individual asset exposure level. For each asset, the Partnership will have strict concentration limits that will vary according to the General Partner’s qualitative view of liquidity. The Partnership will use a quantitative algorithm to redistribute risk away from trades that put the Partnership over concentration limits and toward trades that have room under the limit. The Partnership intends to redistribute risk as evenly as possible in order to maintain a balanced portfolio. The Partnership will also have a limit on total leverage and will be constrained by margin requirements. The Partnership will have a specific risk target that will be managed by a series of quantitative volatility models that will operate at the portfolio level.

The Partnership’s risk models will use weighted past observations to create a forecast of future portfolio volatility. The weights will be balanced differently in the different models, as they will be tailored to be optimal in different volatility regimes. For example, in September and October 2008, the optimal risk model was one that considered only recent data in its estimate. Rather than try to guess what regime the Partnership will be in, the Partnership will calculate risk using all of its volatility models and then use the highest (worst-case scenario) in the Partnership’s risk targeting.

ROW Asset Management is currently drafting a risk management policy document. – DISCUSS CHGS TO DDQ

Risk management is the most important element of our investment process. Our investment process is systematic, and therefore lends itself to empirical methods of risk estimation. We have “gates” that limit risk at the trade level, the strategy level, and the portfolio level. We have a “Loss Mitigation Model” whose sole purpose is to isolate losing positions and reduce them. The key benefit to our cluster approach to portfolio construction is that we compartmentalize the risk of erroneous estimates of correlation.

The Loss Mitigation Model is effectively a portfolio-level hedging program. The Loss Mitigation model decomposes our portfolio into its component pieces, and tracks performance. If there is a particular trade that is losing above a threshold rate, the Loss Mitigation Model reduces exposure to that trade. It is entirely systematic.

We also have many years of experience on the “human” side, reducing positions at times when we feel our models are not accurately representing the true risk in the market. These instances are rare, typically associated with exogenous events.

We have various risk limits built into our systems, so that position output is algorithmically limited at or below these limits. The final stage of our risk management is human oversight – if we judge that our empirical risk estimates are not accurately representing the true risk in the market, we have the ability to reduce positions at the Investment Committee level.

The portfolio manager may take exceptions of up to 20% of the size of any given position. For example, if we have a position of 25% of AUM in a given asset, the PM can add or subtract up to 5% of AUM to this position (+/- 20% of the original position size). Exceptions tend to be smaller than this, and tend to reduce the position (or risk) in unusual circumstances for a short period of time (24-48 hours).

Traders may deviate 20% above or below the system’s position in a given market – i.e. if we have a $1million position in the EUR, they can go from $800,000 to $1.2mil. Trader positions are monitored vs. the system on an on-going basis, and reports are sent to and reviewed by the CEO daily. The Investment Committee (Jeff Weiser and Ryan O’Grady) can reduce risk further in exceptional situations. All such deviations to the system are monitored, and their performance impact recorded and reviewed.

The investment committee may take larger exceptions in extreme circumstances, to reduce risk. These exceptions are associated with one-off events that the model cannot foresee, such as the BOJ reaction to the tsunami in March 2011 in Japan, or the SNB underpinning the EUR/CHF at 1.2000.

Discretion is usually associated with reducing risk and/or losing positions.

We use judgment in selecting the assets we trade.

We use judgment in establishing concentration limits, risk limits, and leverage limits put on the portfolio.

We use judgment in determining the maximum allowed contract maturity.

We use some judgment on timing the position rolls.

We use a Monte-Carlo simulation of fat-tailed future innovations to stress test our positions every day. Estimated maximum risk is 24% annualized estimated standard deviation. We use a Monte-Carlo technique using non-normally distributed returns to simulate a true fat-tailed environment in order to forecast the future return distribution. The risk estimate is the 2nd moment of this estimated distribution.

ROW uses its own models to calculate VAR and estimate a distribution of expected future returns. We have extensive experience estimating risk, especially risk of non-normally distributed time series. Market data is sourced from a combination of data providers (most notably Bloomberg) and manual data confirmation with our interbank trading partners.

When we hit overall VAR limits on risk in a given strategy/asset class/portfolio, all positions in the affected silo would be reduced.

Risk management (other than the risk management done within the investment process) is handled through a series of reports that were designed by us. These reports are released throughout the day

Trade sheet, FX; Trade sheet, Futures: FX and Futures are reported separately because they are OTC forwards, and futures/options on futures, respectively.

Check It, FX; Check It, Futures: Verifies that actual positions (as sourced from our PB/FCM) match the desired position of the model. Differences are highlighted and reviewed by the CEO daily.

Factor risk analysis, FX: We track our exposure to the FX market versus a variety of passive investment styles.

Risk analysis, Futures: We monitor risk at the position level and the portfolio level within the futures book.

Monte Carlo Risk Sheet: This is our all-encompassing risk report. Rather than use empirical methods of risk estimation, as in the reports above, we simulate future paths for all time-series we trade using a fat-tailed data generating process. Using simulated as opposed to historical data allows us to stress-test our portfolio beyond what we have seen in the past.