



MIMS – Long-Short Equity Fund

Portfolio Management Team

Report – March 2020

Fund description

MIMS – Long Short Equity Fund is an actively-managed fund by Minerva Investment Management Society, based on a zero-net investment ‘multi-factor’ strategy. The Fund has the investment objective of achieving a positive absolute return, through long-term capital appreciation.

Market update

- The outbreak of coronavirus and its relative disease (COVID-19), first in China and then globally, had severe financial impacts on global economies. Implied volatility spiked and massive sell-off took place, primarily driven by investors’ fear and prevailing uncertainty over the further yet-to-witness bad consequences on global financial health and the subsequent speed and strength of recoveries.
- Positive and rising market trends, in place since summer 2019, have abruptly reversed: MSCI ACWI Index left almost 27% on the table, over the past month, recording its worst performance since the 2008-2009 global crisis. Almost identical performance for the US broad equity market index S&P500. Slightly worse (-28%) for the European STOXX 600 Index.
- Traditional targets of flight-to-quality movements, such as gold and German BUND, still served as safe-heaven assets during the second half of February, but could not escape widespread selling orders during the first half of March, recording negative performances.
- Partly as a consequence of COVID-19 outbreak and partly because of tensions between major producers, Oil prices plunged as well, recording among the worst performances over the whole history of the market (both WTI and Brent hit as low as 20 USD/barrel).
- In a context of such a full-blown crisis, we expect the Fund to have experienced performances in line with the general market downturn. Nevertheless, as of now, evidence suggests an event-driven bear market, rather than a structural or cyclical one: for this reason, evidence does not seem to question future potential recoveries and long-term sustainability of Fund’s performances.



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Factor Investing Strategy

| | |
|---------|------------|
| VALUE | MOMENTUM |
| QUALITY | VOLATILITY |
| SIZE | ESG |

3 steps Investment Approach

Multi Factor Analysis

Fundamental metrics are identified that best proxy each of the 6 factors on which the investment style is grounded.

The process involves theoretical-based frameworks as well as empirical evaluations. Cross-team expertise and Minerva IMS insights are deployed.

Screening and Normalization

Stocks are evaluated on the basis of their exposure to each single factor. Through a 3-step Winsorization test, outliers are discarded with reference to each factor. The output of the process is a synthetic score, on the basis of which stocks are ranked.

Strategic Asset Allocation

Portfolio allocation comes to live. Based on the ranking produced, long and short positions are taken accordingly.

Macro environment is always monitored. Significant changes may lead to reconsider the chosen set of factors, or their weights, thus affecting the first step of the process.

Investment Approach

The Fund uses a «multi-factor» based investment style adopting a quantitative proprietary model in order to achieve a systematic, rules-based approach to stock selection.

Stocks are selected from the broad US Equity market (S&P 500 Index) and the European Equity market (Euro STOXX 600 Index).

A score is produced with reference to each considered style factor: (1) 'value' (stocks appearing cheaper with respect to their fundamentals); (2) 'momentum' (investments with relatively strong recent performance); (3) 'quality' (as reflected by indicators such as ROE and consensus EPS forecasts); (4) low volatility; (5) size (in terms of market float); (6) ESG factor (as conveyed by Thomson Reuters ESG Score).

A systematic procedure is implemented to isolate and discard the most extreme stocks with reference to each single factor. Each factor is given equal weight in the process of building a final score for each stock. Sector-neutrality is not pursued in the process of selecting stocks.

Factor Analysis

Obviously, the spread of COVID-19 will require a further consideration of the factors, to investigate which structural changes the virus has produced in the market conditions and, therefore, which will be the future drivers of value.

Seen the instability of the market and the tendency to over and underestimate the larger amount of companies, pursuing a long-term value creation goal based on fundamentals, we decided to stick with the factors identified before the crisis up to when we will have verified changes in market's fundamentals.

The last Fund rebalancing of November 2019 has generated a portfolio quite balanced amongst the different sectors. Indeed it is neutral in three industries (Telecommunications, Oil & Gas and Basic Material), while it is slightly short in four of them (Technology, Health Care, Consumer Goods and Utilities) and slightly long on three (Consumer Services, Financial and Industrials).

In a downturn phase like the one recently experienced by the market, the Fund was able to guarantee the gains obtained in the previous period, which we could identify as a more stable and conventional market situation.

At the same time, the spread of the virus has arisen some considerations that will be taken into account in the following selection of the factors, in order to perform a value creation even in downturn periods. The COVID-19 situation is an asymmetric crisis that has hit the majority of the industries, while boosting few of them (Health Care, Consumer Goods and Technology).

Therefore, having short positions in these sectors has reduced the overall performance of the Fund, which still outperformed the sectors' performances, highlighting the proficiency of the factors in protecting the value.

Fund Factors

Value Factors (Buy cheap, Sell expensive)

- Price-to-Book Value (P/BV): following the broad evidence provided by existing literature (e.g., Fama-French (1993)), we regard a high P/BV as a signal of relative overvaluation. We thus consider it as a selling indicator, since it shows that the company's equity is very expensive if compared with its underlying book value.
- EV/EBITDA: we regard a high EV/EBITDA as a selling signal, because it shows that the company is not able to generate a satisfactory level of profits if compared to the value of the assets used to generate such profits.

Momentum Factor (Buy recently best performing stocks, Sell worst performing stocks)

- MOM: following the evidence provided by Jegadeesh and Titman (1993) and Asness (1994), we consider momentum, defined as the compounded monthly return over the previous 13 months, excluding the last one, as a buy signal. In practice, we assume that the market will not invert its trend soon.

Quality Factors (Buy high quality stocks, sell low quality stocks)

- FW 12m EPS-Trailing EPS: a higher value of this metric represents a buy a signal. Although not widespread, we introduced this factor in order to capture analysts' views (analysts' revisions). It is indeed built as the difference between the 12 month forecast EPS made by analysts and the trailing EPS recorded (last 12 months EPS). For companies with a high positive value of this indicator, we thus assume an increase in the stock price in the future that will mirror the earnings behaviour.
- ROE: we consider a high ROE, normalized for industry influence, as a signal of high profitability, and, thus, a buy signal. Specifically, we are assuming that investors' profitability will maintain its trend in the future and will be a reliable driver of future increases in stock prices.

Volatility Factor (Buy low volatility, Sell high volatility)

- Standard deviation: we deem a higher standard deviation to be a selling signal, since it reveals a riskier situation where returns are less stable, and, consequently, less predictable.

Size Factor (Buy small cap, Sell large cap)

- Free-Float Market Capitalization: a lower market cap is assumed to be a buy signal, since small cap stocks have historically shown relatively better performances than large cap stocks (see Banz (1981), Reinganum (1981) for empirical evidence in the academic literature).

ESG Factor

- Thomson Reuters ESG Combined Score: we assume a higher ESG score to be a positive signal, since it reveals more attention to the sustainability of a firm. Although this factor has still few data recorded, market evidence suggests that, in the long run, a higher ESG score allows sustainable investments to perform equally or even better than traditional ones, showing an improvement in the long-term risk-adjusted returns.

Fund Composition

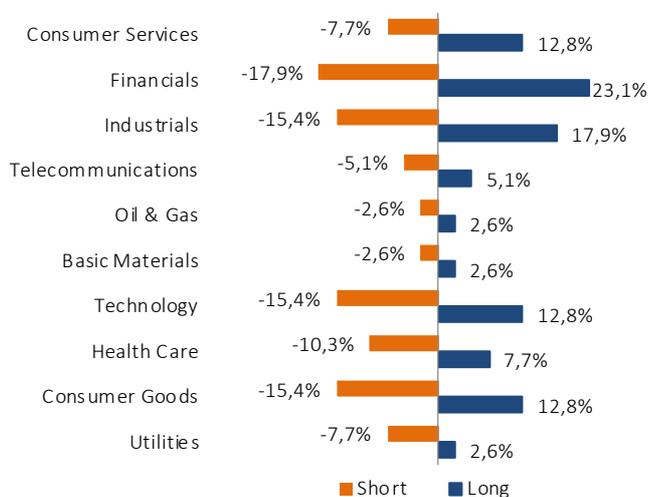
The rebalancing of Long-Short Equity Fund consists in buying stocks with the highest total score and short-selling stocks with the lowest. The total score for each security is an equally weighted average of the final factors' scores that each stock has registered, after having applied the Winsorization technique and the data normalization procedure.

The equally weighted scheme has been adopted in order to preserve the factors identity. In this way we avoided the possible drawbacks that optimization techniques, such as the ones based on the mean-variance approach, could have caused to our portfolio.

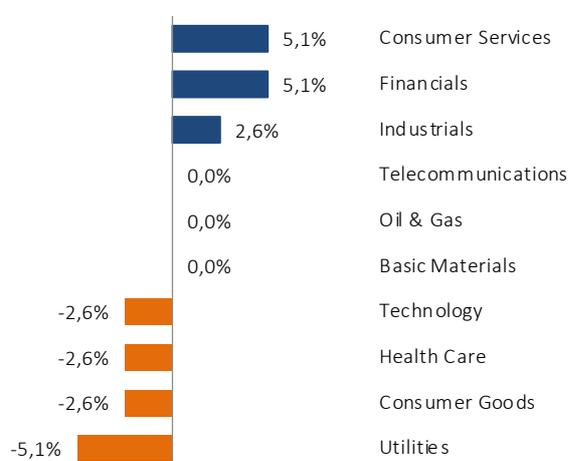
| NEW PORTFOLIO NO SECTOR NEUTRAL | | | | | | | | | |
|---------------------------------|--------------------------|-------------------|--------------|--------|-----------|-------------------------|--------------------|--------------|--------|
| S&P 500 | | | | | STOXX 600 | | | | |
| # | Name | Industry | Score | Weight | # | Name | Industry | Score | Weight |
| 1 | AMCOR | Industrials | 0,939694459 | 1/n | 1 | WIENERBERGER | Industrials | 1,059523763 | 1/n |
| 2 | MSCI | Financials | 0,778561079 | 1/n | 2 | SEVERN TRENT | Utilities | 0,786183797 | 1/n |
| 3 | NVR | Consumer Goods | 0,77778068 | 1/n | 3 | RENTOKIL INITIAL | Industrials | 0,778329915 | 1/n |
| 4 | AUTOZONE | Consumer Services | 0,737995037 | 1/n | 4 | RTL GROUP (XET) | Consumer Services | 0,762143409 | 1/n |
| 5 | KIMBERLY-CLARK | Consumer Goods | 0,704065781 | 1/n | 5 | NN GROUP | Financials | 0,757481292 | 1/n |
| 6 | ANTHEM | Health Care | 0,636907211 | 1/n | 6 | ROYAL BANK OF SCTL.GP. | Financials | 0,75071172 | 1/n |
| 7 | MASCO | Industrials | 0,624299309 | 1/n | 7 | SOCIETE GENERALE | Financials | 0,730344867 | 1/n |
| 8 | LAMB WESTON HOLDINGS | Consumer Goods | 0,604197251 | 1/n | 8 | BT GROUP | Telecommunications | 0,710706881 | 1/n |
| 9 | LAM RESEARCH | Technology | 0,603855156 | 1/n | 9 | UNITED INTERNET (XET) | Technology | 0,682437405 | 1/n |
| 10 | KLA | Technology | 0,600410679 | 1/n | 10 | CYBG | Financials | 0,664017521 | 1/n |
| 11 | CLOROX | Consumer Goods | 0,594539449 | 1/n | 11 | DEUTSCHE BOERSE (XET) | Financials | 0,658117954 | 1/n |
| 12 | HOME DEPOT | Consumer Services | 0,59091291 | 1/n | 12 | SEB | Consumer Goods | 0,657101059 | 1/n |
| 13 | FOX A | Consumer Services | 0,564990315 | 1/n | 13 | ALTRAN TECHNOLOGIES | Technology | 0,645754934 | 1/n |
| 14 | HARTFORD FINL.SVS.GP. | Financials | 0,536943247 | 1/n | 14 | INVESTOR B | Financials | 0,645429306 | 1/n |
| 15 | LYONDELLBASELL INDS.CL.A | Basic Materials | 0,530088155 | 1/n | 15 | 1&1 DRILLISCH | Telecommunications | 0,632004426 | 1/n |
| 16 | CDW | Technology | 0,527037434 | 1/n | 16 | HOCHTIEF (XET) | Industrials | 0,605595189 | 1/n |
| 17 | ALLSTATE ORD SHS | Financials | 0,522043327 | 1/n | 17 | DECHRA PHARMACEUTICALS | Health Care | 0,589453072 | 1/n |
| 18 | SYSCO | Consumer Services | 0,522014672 | 1/n | 18 | BOUYGUES | Industrials | 0,577165831 | 1/n |
| 19 | DEVON ENERGY | Oil & Gas | 0,513317341 | 1/n | 19 | BB BIOTECH N | Health Care | 0,5531732 | 1/n |
| 20 | WELLS FARGO & CO | Financials | -0,559307052 | 1/n | 20 | WEIR GROUP | Industrials | 0,547790591 | 1/n |
| 21 | MICRON TECHNOLOGY | Technology | -0,568845854 | 1/n | 21 | CELLNEX TELECOM | Telecommunications | -0,629057929 | 1/n |
| 22 | TWITTER | Technology | -0,573611155 | 1/n | 22 | COMPASS GROUP | Consumer Services | -0,642348513 | 1/n |
| 23 | KRAFT HEINZ | Consumer Goods | -0,597834465 | 1/n | 23 | SMURFIT KAPPA GROUP | Industrials | -0,644293376 | 1/n |
| 24 | BANK OF AMERICA | Financials | -0,608066687 | 1/n | 24 | SVENSKA HANDELSBANKEN A | Financials | -0,651533211 | 1/n |
| 25 | TRIPADVISOR 'A' | Consumer Services | -0,627850815 | 1/n | 25 | TEMENOS N | Technology | -0,660171644 | 1/n |
| 26 | GENERAL ELECTRIC | Industrials | -0,636719789 | 1/n | 26 | DEUTSCHE POST (XET) | Industrials | -0,686151995 | 1/n |
| 27 | MYLAN | Health Care | -0,650206493 | 1/n | 27 | VEOLIA ENVIRON | Utilities | -0,686377215 | 1/n |
| 28 | ALIGN TECHNOLOGY | Health Care | -0,678613694 | 1/n | 28 | BARRATT DEVELOPMENTS | Consumer Goods | -0,756380786 | 1/n |
| 29 | PAYPAL HOLDINGS | Industrials | -0,699203784 | 1/n | 29 | SUNRISE COMMUNICATIONS | Telecommunications | -0,767699561 | 1/n |
| 30 | WILLIAMS | Oil & Gas | -0,714987703 | 1/n | 30 | JARDINE LLOYD THOMPSON | Financials | -0,785885158 | 1/n |
| 31 | QUALCOMM | Technology | -0,784538177 | 1/n | 31 | UNILEVER DUTCH CERT. | Consumer Goods | -0,804086372 | 1/n |
| 32 | DUPONT DE NEMOURS | Basic Materials | -0,80986349 | 1/n | 32 | ORKLA | Consumer Goods | -0,806156773 | 1/n |
| 33 | FEDEX | Industrials | -0,834230455 | 1/n | 33 | DASSAULT AVIATION | Industrials | -0,84373892 | 1/n |
| 34 | NETFLIX | Consumer Services | -0,847069871 | 1/n | 34 | BANKINTER 'R' | Financials | -0,844283414 | 1/n |
| 35 | ADVANCED MICRO DEVICES | Technology | -0,92183717 | 1/n | 35 | NATURGY ENERGY | Utilities | -0,877104629 | 1/n |
| 36 | ABIOMED | Health Care | -0,987950086 | 1/n | 36 | AMUNDI (WI) | Financials | -0,882350697 | 1/n |
| 37 | UNDER ARMOUR 'C' | Consumer Goods | -1,050208252 | 1/n | 37 | BECHTLE (XET) | Technology | -0,915590594 | 1/n |
| 38 | EDISON INTL. | Utilities | -1,187913536 | 1/n | 38 | ADMIRAL GROUP | Financials | -0,936313968 | 1/n |
| | | | | | 39 | TECAN 'R' | Health Care | -1,071896692 | 1/n |
| | | | | | 40 | DAIMLER (XET) | Consumer Goods | -1,324560984 | 1/n |

Fund Positioning

Long and short allocation



Net exposure



Performance

03.12.2018 - 31.03.2020



| <i>Performance as of 31.03.2020</i> | YTD | 6 months | 1 year | Since inception | Volatility S.I. |
|--|--------|----------|--------|-----------------|-----------------|
| Minerva IM – Long Short Equity Opportunity | -4.51% | -5.12% | -1.81% | 1.46% | 11.38% |

| Top Scorers | Industry | Score | Worst Scorers | Industry | Score |
|------------------|-------------------|-------|-------------------------|-------------------|-------|
| S&P 500 | | | S&P 500 | | |
| AMCOR | Industrials | 0.94 | NETFLIX | Consumer Services | -0.85 |
| MSCI | Financials | 0.78 | ADVANCED MICRO DEVICES. | Technology | -0.92 |
| NVR | Consumer Goods | 0.78 | ABIOMED | Health Care | -0.99 |
| AUTOZONE | Consumer Services | 0.74 | UNDER ARMOUR 'C' | Consumer Goods | -1.05 |
| KIMBERLY-CLARK | Consumer Goods | 0.70 | EDISON INTL. | Utilities | -1.19 |
| STOXX600 | | | STOXX600 | | |
| WIENERBERGER | Industrials | 1.06 | AMUNDI (WI) | Financials | -0.88 |
| SEVERN TRENT | Utilities | 0.79 | BECHTLE (XET) | Technology | -0.92 |
| RENTOKIL INITIAL | Industrials | 0.78 | ADMIRAL GROUP | Financials | -0.94 |
| RTL GROUP (XET) | Consumer Services | 0.76 | TECAN 'R' | Health Care | -1.07 |
| NN GROUP | Financials | 0.76 | DAIMLER (XET) | Consumer Goods | -1.32 |

Source: Minerva Investment Management Society and Thomson Reuters Datastream. Past performance is not an indicator of future success

DISCLAIMER

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