Knowing and understanding risk

mangustarisk

Who is MangustaRisk?

MangustaRisk is a UK based consultancy firm that supports Institutional Investors with regard to direct and indirect asset management. From the very start it has always specialised in: risk management, asset allocation, managers selection and performance evaluation. To date, MangustaRisk's clients have a total of over 20 billion Euro in assets under management.

MangustaRisk is an **independent company**, which is not held by and/or has no holding in Banks or other Financial Institutions. Likewise there is no agreement of any kind for selling, promoting or distributing financial products between MangustaRisk, or its partners, and any financial company. MangustaRisk and its professionals do not propose or solicite the purchase of any financial product or adhesion to any investment fund.

In 2002 our customer InarCassa (Italian National Pension and Security Fund for Engineers and Architects) was awarded the **IPE Award** for the best investment process, thanks to the methods put into practice in recent years through MangustaRisk.

MANGUSTARISK UK LIMITED

London
15A Shorts Gardens
London WC2H9AT
tel. +44 20 7240 3284

New York
115 West Broadway
New York, NY 100013
tel. +1 212 566 8620

Roma
Via del Tempio 1/A
00186 Roma
tel. +39 06 4543 9400

e-mail
contact@mangustarisk.com

website
www.mangustarisk.com

What risk is the portfolio exposed to?

Isn't the risk too high for the results obtained?

Can I evaluate a money-manager? Moreover, can I analyse his work?

How much Value is the manager adding to the portfolio?

Which is the best manager in this sector?

Is the portfolio suited to the current situation? And to the upcoming one?

Is the portfolio capable of achieving the return I planned?

Could I obtain a higher return with the same level of risk?

What is the maximum return I can expect with this level of risk?

What is the minimum level of risk that I will have to bear for this return?

Why so many questions?

Because they are the **first step** towards developing a more efficient and effective decision and management process: **questions help us improve**.

MangustaRisk UK Ltd offers to support its customers starting from this important and delicate phase: **asking questions and making sure they are the right questions**. Only the right questions have **answers** that will **create a direct and concrete value**.

Mangustarisk is an independent company offering quantitative analysis and consultancy to assist Institutional Investors with regard to their direct and indirect asset management.

Our main aim is to offer support – both technical and independent – to the governing bodies, in order to allow the implementation of the safest and most efficient investment and management strategies.

Is there such a thing as return without risk?

Every financial asset is characterised by its risk and profitability, it is therefore possible to identify every investment by the measurement of these two values. Return is a direct function of risk (usually, a higher return implies a higher risk, and vice versa).

Risk can be seen as the possibility of achieving a return lower than expected. E.g., real negative yields will reduce the capital.

Risk may depend on a number of factors, each of which in turn associated to a different type of risk. These can be divided into three categories: **Business Risk, Non-business Risk and Financial Risk**.

The risk of a single financial asset is not manageable. However, it is worth remembering that **it is the entire portfolio risk level that represents the most important figure for an investor**.

It is therefore of the utmost importance to identify and carefully measure the overall portfolio risk level and how it varies, rather than looking at the single assets. This is due to the fact that, unlike the risk level of a single financial asset, **the risk of a portfolio can be managed, modified and therefore optimised**.

As risk is thus a manageable value, why not entrust **your risk management** to experts, in the same way you entrust return management to professionals, instead of simply leaving it to a series of undefined considerations termed good sense ?

Institutional Investors, in order to achieve their goals, are today changing from being asset managers to being risk managers.

Is the portfolio suited to the current situation?

In recent years, a growing capital flow has poured onto the financial markets by means of increasingly varied and sophisticated operations (e.g. inflation bonds, volatility bonds, equity linked bonds, asset backed securities, hedge funds), with the aim of achieving satisfactory return levels. However, investors entering the financial markets scene have to face new problems such as: **strong growth in the level of portfolio risk and increased complexity of the themes dealt with**.

It is in this financial context that Investors have to take decisions and act. This is why it is necessary to create **NEW** decision and management models that respond to changing market conditions. Furthermore, timely **INFORMATION** and a whole series of **TOOLS** have to be provided in order to allow both strategic and tactical decision processes to be formulated in a knowledgeable and articulated manner.

It is for this purpose that MangustaRisk has developed and offers the following support activities:

- **Risk management: financial risks analysis and management;**
- **Strategic and tactical asset allocation: building and managing an investment portfolio through quantitative models;**
- **Asset manager selection, benchmarking, reporting: setting up the asset entrustment process and monitoring the asset manager activities;**
- **Financial products analysis and evaluation;**
- **Performance evaluation, performance attribution, style analysis;**
- **Training.**

What risk is the portfolio exposed to?

A portfolio is always and anyhow exposed to some level and type of risk. Therefore the investor does not have the option of not risking. The only option the investor has, is to choose the amount and type of risk he wants to be exposed to. In order to achieve this, it is necessary to manage the portfolio risks, otherwise this opportunity would be lost. The approach to asset management must evolve

Risk management is not a choice, it is a duty.

Risk Management activities are made up of two main interdependent factors: **risk measurement and risk management**.

- **Risk measurement is the identification and objective quantification, on a scientific basis, of all the Risks to which a portfolio of financial assets is exposed to, according to current market conditions.**

- **Risk management, on the other hand, is the set of actions aimed at configuring the portfolio to keep risk exposure within set limits and to optimise risk with respect to the conditions imposed.**

It is important to stress that risk is not a static value, but an element subject to constant mutation according to market conditions variability. Risk measurement and management activities must be in place on a continuous basis: if these activities are only carried out from time to time they are ineffective.

Is the portfolio capable of achieving the return I planned?

An investor, after defining the risk/return profile that suits him, must take action to carry it out, building up a portfolio capable of achieving results that comply with his set profile.

The Asset Allocation process identifies the most efficient portfolio which is the one that provides the best returns for the accepted level of risk. The chosen portfolio has the set risk/return profile and is in compliance with the restrictions set down by the person in charge of managing the portfolio.

The result of this activity is to determine a portfolio with the fixed expected return and with the lowest possible level of risk; alternatively, to determine a portfolio with a level of risk considered acceptable and with the highest possible expected return.

Asset Allocation defines: the portfolio to be created giving detailed indications on the way resources are to be divided up and used to achieve it, always bearing in mind the markets progress and the investor needs.

Asset Allocation creates: the reference framework used by the decisional bodies to govern the portfolio management activities as a whole.

Asset Allocation is: an effective risk management tool, as it is the only method of implementing true, systematic and complete diversification.

The Asset Allocation process developed by MangustaRisk is completed by *sensitivity and scenario analysis and stress testing procedures*, in order to guarantee more consistent results. These activities allow to build up a portfolio capable of achieving the expected results in the greatest number of probable market situations.

How much Value is the manager adding to the portfolio?

Entrusting assets to managers or the direct management of assets, are operations that must involve a number of important actions, among which:

Benchmark definition

The two main functions of the benchmark are: to indicate the markets, and their risk/return characteristics, within which the manager has to operate in order to implement the Asset Allocation. The second function is to summarize the context within which the manager operates in order to evaluate his result by comparing his performance with the specific reference market. Setting a representative, replicable and transparent benchmark is therefore essential for asset management, manager selection, and performance evaluation.

Asset manager selection

The primary goals of entrusting assets to external money managers are: achieving the best results in terms of risk and return, and obtaining the results formalized in the asset allocation. It is thus necessary to identify the managers most likely to achieve these aims. The selection process used by MangustaRisk comprises: a series of quantitative and qualitative analyses at various levels; meetings and interviews with managers and their assistants; and evaluation of the models, procedures, strategies and risk management processes employed.

Performance evaluation

The basic principle of performance evaluation is to measure and have an overall picture of all the elements characterising asset management results. Money manager results must be related to both market (benchmark) and risk free figures. In order to analyse every sensitive feature of an asset management operation, MangustaRisk integrates its evaluation procedure with *Performance Attribution* and *Style Analysis* (factor analysis).

An institutional investor can consider the performance evaluation process an asset management tool as it provides direct, transparent and independent knowledge of the way asset managers are operating. This allows to foresee possible critical situations and to evaluate money managers results, added value and their ability to achieve set goals.

Reporting

Asset management activities must be continuously monitored in terms of: fulfilment of the set requirements; compliance with contractual obligations; accuracy in tracking the benchmarks (tracking error); validation of the results achieved; correctness of data and information supplied. The reporting activity is the gathering and organization of a set of relevant, appropriate, verified, punctual, accurate and easily comprehensible information. This enables the responsible bodies to control asset management activities and ensure that the obligations and responsibilities assigned are fulfilled. The reporting procedure can be seen as a way of controlling the asset management activity.

Training

To work in today's scenario, an institutional investor's management and staff have to face new and complex situations, often different from their personal background, training and experience. It is therefore important to foster the spread of the necessary knowledge, the availability of new working tools and a proper understanding of their use. MangustaRisk organises training courses on the topics involved in the consulting services it provides. These courses cover the spectrum ranging from basic to advanced level. The aim is to support the management and train their staff to deal with new situations and problems.

The "appropriate" investment process
- integrated asset and risk management -