open architecture

Basic definitions

UCITS (Undertakings for Collective Investment in Transferable Securities). Defined as organizations, whose sole purpose is to collectively invest - in securities and other financial assets - capital raised by the public and which operate under the principle of risk management. The units of these UCITS, following unit holders' request, can be repurchased or redeemed, directly or indirectly, with assets of these organizations.

In individual capital markets the UCITS may take specific forms (with or without legal personality). The most known type of UCITS is **SICAV** (Société d'Investissement à Capital Variable), a UCITS with legal personality and **FCP** (Fonds Commun de Placement), a UCITS without legal personality). In Greece the basic type of UCITS is without legal personality, known as **Mutual Fund.**

UCITS is a group of assets, a portfolio of securities and cash, which belong collectively to more than one person (unit holder). UCITS is a financial vehicle that allows a group of investors to invest their money under a predetermined investment objective.

The UCITS have a fund manager, who is responsible for investing money in the underlying securities. By investing in a UCITS, essentially, the investor buys units and becomes a unitholder. Thus, by placing the money in UCITS each investor assigns the right to the management team of UCITS to invest on his behalf, freely and provided that the term of achieving the maximum possible return for the risk incurred by the investment, is accomplished. Investors have the option to withdraw their money from the UCITS by liquidating the units held.

Rating

There are two major rating agencies for UCITS, Morningstar and S&P. The Morningstar rating is a proprietary quantitative assessment of a UCITS's past performance – both return and risk – as measured from a scale from one to five stars. Funds are rated for up to three time periods, three, five and ten years. A fund with a trailing period of less than 3 years is not evaluated.

The Morningstar rating is based on "expected utility theory" which recognizes that investors are a) more concerned about a possible poor outcome than an unexpected good outcome and are b) willing to give up some portion of the expected return in exchange for greater certainty of positive return. The rating takes into consideration all variations in a fund's monthly performance, rewarding consistent performance and "punishing" intense short-term fluctuations. The overall Morningstar rating of the fund is the weighted average of the 3y, 5y and 10y performance. Based on the asset class to which they belong, the UCITS are classified by performance (already adjusted to risk). Stars are awarded so that the distribution is normal: 10% of UCITS with higher yields evaluated with 5 *, the next 22.5% with 4 *, the middle 35% with 3 *, the next 22.5% with 2 * and the last 10% with 1 *.

S&P has developed since 1990 a process evaluation of UCITS based on five basic steps: quantitative detection, previous auditing, qualitative face-to-face interview, evaluation committee and final testing. S&P assess UCITS the rates: AAA, AA, A

Citywire evaluates the fund manager of the respective UCITS by monitoring the history of returns in various UCITS even in different management companies. Citywire evaluates managers based on a proprietary type methodology, which is based on the idea of the information ratio, from which the manager ratio of each manager is derived. For each of the investment categories, the average manager ratio is calculated and administrators are divided into two groups, one consisting of managers with higher manager ratio and one with the managers at a lower than average ratio. The managers with high average manager ratio are further evaluated, with average ratio recalculated and divided again into two groups (above and below the average ratio). The same process is repeated again for both groups, resulting in 4 manager classes that exceed the (initial) average manager ratio of the examined investment grade. Managers belonging to the three best classes are awarded with AAA, AA and A respectively.

Key Investor Information Document (KIID) is a short document introduced by Directive 2009/65/EC (UCITS IV) aiming to simplify and standardize the basic information provided by the UCITS to investors. Its form is standardized in terms of both the size as well as the content. The accuracy and standardization of the provided information helps investors identify differences between UCITS and compare them.

Useful information for investors

- Purpose, investment scope and investment policy
- Investment Risk Profile. SRRI: Risk/Return indicator with value from 1 to 7. The higher the value of the indicator, the higher the investment risk
- Past performance
- Costs/Fees/Charges
- Useful information like transfer agent, custodian, current law regulations

Benchmark

The benchmark is the point of reference in order to compare the performance of the UCITS. A benchmark usually gives an indication of how, for example, a stock exchange index or the interest rate of a capital market behaves in a particular country. An index can also be seen as a reflection of part of a market. Its value increases/decreases when the total value of the respective securities increases/decreases. Each index has its own method of calculation and is usually expressed in terms of percentage change from an initial value. Thus, the percentage change is more important than the absolute numerical value. Stock exchanges typically issue one or more indicators. Additionally, indicators are calculated and issued by different financial services providers or stock indices e.g. Morgan Stanley Capital International (MSCI) and Standard & Poor's / Financial Times (S & P / FT). Some of the criteria by which the indicators are synthesized are the investment style, geographic distribution, size of firms and sectors.

When considering the performance of a UCITS in relation to the benchmark, attention should be given to the great difference between the values of the indicators and their overall performance. An index, with the title "price index" shows only fluctuations in the prices of securities included in the index. A total return index includes not only the price fluctuations but also dividends distributions, assuming that they are reinvested.

Asset Managers use these indicators as benchmarks when managing investment portfolios. The choice of benchmarks is part of the agreement made when developing the investment objective. The selection of the reference index is an important determinant of the risk profile, composition and expected return of the investment portfolio. An index has two specific functions, investment objective and measure of performance. The investment objective refers to all securities, which are obtained compared to the index. In other words, the benchmark functions as a guideline for the manager's investment decisions. In order to evaluate the manager's performance, the portfolio's performance is often compared with the performance of the relative benchmark (performance measure). In fact, the targeted return is often conformed in relation to the performance of the index.

Fund Manager

The fund manager implements the investment strategy and takes investment decisions. Experienced investors tend to choose the UCITS in which they will invest based on this criterion. In addition, the experience of a fund manager and the years that he runs a specific fund, are key parameters to be considered. According to an investment principle in order to become a successful portfolio manager, one should have experience in good and bad markets. If this is a reasonable assumption, managers should have experience of a complete market cycle, which usually lasts 3-

4 years. Fund Manager's experience indicates consistency and dedication to the investment strategy.

Inception Date

Refers to the date on which the fund was first launched. Sometimes the inception date of the UCITS is published (the older share class) while other times the inception date of a specific share class is merely published. UCITS with longer history are usually preferred by investors because they can study their performance over a longer period and different market cycles (upside and downside). Also, funds with long track records are subject to evaluation, since most rating companies require more than 3 years of performance in order to rate mutual funds (Morningstar).

Custodian

UCITS property is kept by a different financial institution, which acts as a custodian, in order to secure investors' interests. The Custodian must be aware at any given time of the portfolio holdings and assets of UCITS and have full access to the related documents. Furthermore he reviews the legitimacy of UCITS' transactions and overall compliance and co-signs the semi-annual accounting statements.

Prospectus

Prospectus describes the investment purpose of the UCITS, where it may or may not allocate its resources, the management style and anything else that concerns the operation of the UCITS. It binds the unitholders, the Custodian and the Management Company and should always be read carefully by potential investors.

Assets under management (AUM)

"Assets under Management" is a term used by asset managers to state how much money they are managing on behalf of the investors. AUM includes all different share classes and currencies and is always expressed in the base currency. AUM change since the total value of assets is subject to capital appreciation/depreciation (gain/losses), foreign exchange movement, inflows and outflows.

Usually, the size of assets under management is a criterion of success for all types of UCITS. Generally, the large size of assets under management shows good performance. On the other hand, there always exist new, small and unknown UCITS that may have good prospects. Moreover, for certain UCITS there may be an optimum size, meaning that too much capital under management may be difficult to find investment opportunities and/or to execute. This can also lead to a liquidity risk in case of an emergency liquidation decision.

Risk metrics

One of the most impressive ironies is that past risk has generally been a more accurate estimate of future risk than past returns of future returns. Risk is generally a more consistent investment attribute than returns. Past returns do a very poor job in predicting future returns.

Returns comprise two elements, the periodic payments of interest or dividends (yield) and changes in net asset values over a period of time (capital gains/losses). All investment decisions involve a trade-off between risk and return. The capital asset pricing model (CAPM) assumes that return and risk are positively related. Investors cannot expect higher returns without being willing to expose to larger risk. Systemic risk is caused by broad market factors that impact most of securities, such as monetary policy, tax policy, inflation, economic and market outlook. Conversely, non-systemic risk is caused by residual factors not captured in systemic risk, such as a company's financial strength, earnings outlook, management skill, brand recognition and competition. Some major types of risks are:

Interest rate risk: rate increases (decreases) are associated with decreases (increases) in bond prices.

Market risk: systemic risk has already been defined. Risk increases (decreases) are associated with decreases (increases) in security prices, but primarily in stock prices.

Inflation (purchasing power) risk: risk increases (decreases) are associated with decreases (increases) in bond prices to compensate for losses (gains) in terms of purchasing power.

Other types of risks are business risk, financial risk (use of debt financing), country risk and political risk.

Class

Two classes are usually offered regarding the dividend policy, the accumulation unit class and distribution unit class. The accumulation unit class accumulates stock dividends, bond coupons and capital gain by reinvesting them in the fund. On the other hand in the distribution asset class, dividends and coupons are paid on a regular basis to investors.

Also two different unit classes are offered based on the type of investor (as well as management fees). Institutional unit class refers to institutional investors, where the minimum investment amount is large and management fees are small. Retail unit class aims at individual investors, where the minimum investment amount is small and the management fee larger in comparison to the institutional unit class.

Top holdings – Sector Breakdown

One useful reference for the definition of UCITS is the list of major holdings and/or the relevant sectors. It contains useful information for determining and categorizing UCITS. Usually equity UCITS quote geographical and sectorial analysis, while Bond UCITS sectorial and credit classification analysis.

The main positions of UCITS provide interesting information especially when compared with the main positions of the benchmark and the operation cycle of the UCITS. The turnover of the portfolio is the frequency with which the portfolio changes throughout a year.

Units

The property of the UCITS is divided in equal units or fractions of units. The owners of these units are called unitholders. The number of UCITS units increases as new investors buy units and decreases when unitholders redeem their units.

Performance Measurement

In order to be able to assess and evaluate an asset manager's performance thorough investigation is needed. A simple and well-known method as described above is the comparison to the benchmark. The relative performance or active return is the difference between the portfolio performance and that of the benchmark. The importance of relative performance is emphasized by the fact that many asset managers formulate their investment objectives in terms of out-performance (generate alpha) against the benchmark over a specific time period. The most commonly used periods (when available) are 1 year, 3 years, 5 years, 10 years, and year to date (YTD) performance.

Risk metrics

Management companies measure and quote investment risk for each UCITS based on the theory of the Modern Portfolio (Modern Portfolio Theory). They usually report beta, R^2, the volatility (standard deviation) and the tracking error.

- Beta: It is a measure of systemic risk, the trend behavior of the portfolios to respond to market changes. A beta of 1.5 means that the value of the portfolio varies half times more, relative to the benchmark (plus or minus the alpha of mutual fund).
- R^2: values range from 0 to 100 and shows what percentage of the movements of the fund is explained by benchmark movements.

- Standard Deviation: It measures the volatility of UCITS returns over the average yield of the corresponding period. The higher standard deviation is generally considered to carry greater risk.
- Tracking Error: It measures the standard deviation (risk) of the difference between the performance of the portfolio and the benchmark

Performance Metrics

These measures are used to measure the investment performance adjusted to the size of the risk undertaken by the administrator. The most commonly known are:

- Sharpe Ratio: Measures the excess return compared to risk free rate for each unit of volatility. The higher the Sharpe Ratio, the better the risk/return relation.
- Sortino Ratio: It measures the excess return compared to risk free rate per unit of volatility for negative returns. The higher the Sortino Ratio the better the risk/return relation. This measure does not penalize undertaking risk when it brings positive returns.
- Treynor Ratio: is the excess return compared to the risk free rate divided by the beta of the fund.
- Information Ratio: is the excess return of a fund compared to benchmark divided by the tracking error.

Currency

Each fund has a base currency, which refers to the currency in which portfolio's transactions are performed. Some Asset Managers offer the same mutual fund in different currencies. For example, a UCITS with US Dollar as a base currency can also have Euro hedged class. In all classes the underlying investment portfolio is the same. The class of the Dollar base currency and the Euro hedged class have almost the same returns for the same time period. On the other hand the returns of the Dollar class (without hedging) are quite different from the return of the Euro class due to the FX risk. Generally, the exchange rate risk is one of the main types of risks. The exchange rate changes may have a significant impact on the returns of the investments.

Management Fee and Total Expense Ratio (TER)

The management fee is the reward of the manager for the UCITS management. Usually it is expressed as a percentage of total assets and can vary from a few to many basis points, depending on the market and the asset class. For example it is cheaper to invest in a stock market of Europe in relation to Emerging equity markets. The management fee covers the cost of research, salaries and etc.

Besides this fee there are additional costs such as transaction, custodian, marketing, accounting costs etc. The sum of all the above types of fees is expressed as total expenses (TER - Total Expense Ratio). The total expenses are reported annually and deducted proportionally from the unit value on a daily basis.

Statistics describing the current UCITS portfolio

For equity funds:

- P/E (price/earnings per share): the ratio is calculated by dividing the price per share by the earnings per share. In theory P/E demonstrates how much investors are willing to pay for €1 profit.
- P/B (price/book value): the ratio is calculated by dividing the stock price by the book value (total assets minus intangibles assets).

The P/E & P/B of a UCITS is the weighted average of all portfolio shares P/E & P/B respectively.

For bond funds:

- Average credit quality: states the average credit quality of the bonds in a UCITS (the credit rating of each security is weighted by the proportionate share of the title in the UCITS).
- Average duration: a measure of the price responsiveness to changes in the market interest rates. This measure is stated in years. Funds with higher average duration will typically experience greater price changes when interest rates change (The duration of each security is weighted by the percentage of the title in the UCITS).
- Average coupon: The average stated annual coupon payment of the bonds in a UCITS, as a percentage of face value (The coupon of each title is weighted by the proportionate share of the title in the UCITS portfolio).

Net Asset Value (NAV)

UCITS units are priced daily at net asset value NAV, which is computed by taking total market value of the portfolio less liabilities and by dividing this amount by the number of outstanding shares. Units are purchased at NAV (plus any sales charges) and sold at NAV (less any fees). The number of units purchased is calculated after the deduction of upfront fees from the initial investment amount.

Transfer Agent

The transfer agent refers to the back office of the UCITS which performs a number of activities: keeps records for investors and transactions, issues, transfers and cancels shares, executes payments-either settlement of subscriptions and redemptions or amounts resulting from corporate actions, sends trade confirmations, as well as overall statements to end investors.