

Chapter 2

Alternative Investments as Modern Financial Innovations

Abstract The second chapter is a logical continuation of the first one. Its purpose is to present the concept of alternative investments as contemporary innovations in the securities market. This chapter shows the various, often differing concepts of alternative investments appearing in the world literature. They formed the basis for defining the conditions that must be met in order for a specific type of investment to be included in a particular category. Moreover, this section discusses the characteristics of alternative investments that distinguish them from traditional forms of investment, which include the pursuit of absolute returns as well as active management of managers mostly investing their own funds in these investments. In addition, diverse investment strategies were characterized along with their essence in pursuit of the so-called absolute profit. At the same time attention was paid to the possibilities offered by alternative investments in portfolio diversification and the use of methods of arbitrage. It also presents the mechanism of a two-tier remuneration system for managers which is used in the management of hedge funds, which are a very important category of alternative investments. This chapter also highlights the specificity of regulation of the alternative investment sector.

2.1 The Concept of Alternative Investments

There is no single generally accepted definition in the literature which would precisely and comprehensively characterize the term alternative investments. Alternative investments offer an extremely broad and diverse group of financial products and services. Therefore, it is difficult to state unambiguously whether they are a separate category of assets or whether they constitute a subcategory of asset classes already present on the financial market (Anson 2006).

Alternative investments are defined in broad terms as investment products that go beyond the range of traditional investments, such as stocks, bonds or money market instruments http://www.investorwords.com/6401/alternative_investments.html. This term includes all assets that are outside those asset classes considered as traditional, for example, hedge funds, private equity and venture capital, as well as investment in art, wine and coins. Swedroe and Kizer (2008) define alternative

investments as a kind of investment outside the known categories of financial instruments such as stocks, bonds and other debt instruments with high investment risk assessment or banking instruments, e.g. certificates of deposit. This concept of alternative investments is also presented by Dębski (2006), who defines this category as all investments that are not included in the traditional forms of investment in the financial market. The European Commission in the Green Paper on the Enhancement of the Legal Framework for Investment Funds (2005) identified alternative investments as hedge funds and private equity funds that give asset managers new diversification benefits. Moreover, they attract investors with the promise of higher returns and can boost overall market liquidity as well. Alternative investment strategies were defined as more complex and involving higher risks for investors than mainstream UCITS funds.

A working document of the European Commission from 2009 defines alternative investments as all funds that are not harmonized under the UCITS Directive. The sector of alternative investment funds, according to the document, includes for instance: hedge funds, private equity funds investing in commodity markets as well as real estate funds and infrastructure funds. The definition of alternative investments typically refers to investments in hedge funds, which are the most important category of alternative investments.

In the European Union Directive (2011/61/EU), which aims to establish common requirements governing the authorisation and supervision of 'AIFs', the term is defined as collective investment undertakings, including investment compartments thereof, which:

- raise capital from a number of investors, with a view to investing it in accordance with a defined investment policy for the benefit of those investors; and
- do not require authorisation pursuant to Article 5 of Directive 2009/65/EC.

There is also the definition of 'EU AIF'. According to the Directive (2011/61/EU), a European Union Alternative Investment Fund is:

- an AIF which is authorised or registered in a Member State under the applicable national law; or
- an AIF which is not authorised or registered in a Member State, but has its registered office and/or head office in a Member State.

However, the definition of Institutional Investor Magazine focuses on distinguishing investment categories within alternative investments that include commodities, derivatives, hedge fund strategies, real estate, venture capital and private equity. A similar approach is presented by Dorsey (2008), who includes as alternative investments hedge funds, private equity, currencies, real estate, commodities and raw materials. These definitions seem to be controversial due to the fact that goods, currencies and commodities could be classified as traditional investments.

Anson (2006) affirms that alternative assets are a subset of existing asset classes. Thus, he opposes the opinion that alternative investments are a separate asset class. The author also claims they are higher risk. Nevertheless, they should, at the same time, make it possible to achieve attractive rates of return, even in the case of

unfavourable market conditions. The author includes as alternative investments hedge funds, commodity funds, managed futures, private equity as well as credit derivatives.

Chorafas (2003) notes that it is difficult to provide a precise definition of the term alternative investments. Additionally, he believes that due to the high diversity and customized features of each category of alternative investments, it is very difficult to compare among themselves the various categories. What is more, he makes an attempt to define alternative investments regarding their use of investment strategies, among which the following are mentioned (Chorafas 2003):

- U.S. long/short strategies, in which there is opportunity to use long and short positions on the U.S. market, allowing development of a profit both in price growth and declines;
- U.S. equity short strategies based strictly on the use of price declines on the U.S. market, allowing development of a profit;
- Europe long/short strategies which involve the use of long and short positions in the European market, allowing a profit to be made both in price growth and declines;
- European equity short strategies that are based strictly on the use of price declines on the European market, allowing development of a profit;
- U.S. emerging growth strategies, i.e. investments in developing companies in the United States;
- macro-type strategies, namely aggressive strategies based on the analysis of macroeconomic indicators;
- event-driven strategies, i.e. strategies using extraordinary events in order to generate income;
- market-neutral strategies, which have the task of reducing the market risk;
- fixed income long strategies which are based on taking long positions in securities characterized by a constant level of interest rates;
- fixed income hedge strategies, in which hedging activities are performed through the use of securities having a constant level of interest rates;
- capital-protected strategies, which belong to the category of strategies that ensure capital protection;
- managed currencies strategies, which take advantage of trade in currencies;
- managed futures strategies, which include transactions carried out by CTAs (specialist advisers) on futures markets;
- credit derivatives strategies focused on trading in credit derivatives;
- risk arbitrage strategies, which are a kind of strategy that uses methods of arbitrage in their activities;
- private placement strategies, covering transactions on the private market;
- other instruments and cash strategies.

Due to the large number of different alternative investments definitions, it seems to be helpful to specify the conditions that should be fulfilled in order to include a given type of investment in that particular category. These conditions can be described as follows:

- usually much higher investment risk compared with the traditional financial investments;
- negative correlation with yield returns of traditional investments in stocks and bonds, or no correlation with the market;
- assumption of maximizing the rate of return/value in an absolute sense, and not on the background of a specific pattern (benchmark);
- investing requiring specialized knowledge and often non-financial knowledge;
- significantly lower liquidity compared with many traditional investments in the financial market;
- often a much longer investment horizon compared with an average investing period in the capital market;
- orientation of the target group of customers to wealthy investors;
- the existence of the so-called barriers to entry, that is, determining the minimum amount of capital enabling the launch of alternative investments;
- the existence of the so-called input limits, that is, limiting the number of potential buyers of investment;
- commonly the private nature of the investment;
- functioning in a market segment with reduced information requirements and a low degree of transparency.

Fulfilling all the above conditions entitles that the type of investment to fall into the category of alternative investments.

2.2 Classification of Alternative Investments

The lack of transparency in the classification, and the often completely different grouping of alternative investments, in large measure results from the lack of a universal definition. Below are selected important alternative investment sector classifications.

The institution of Alternative Investment Services (2006), engaged in services in the alternative investments market, defined six categories which should help in understanding the structure of individual products as well as facilitating the construction of modern diversified investment portfolios. To the category of alternative investments are classified the following:

- hedge funds,
- funds of funds (FOF),
- structured and guaranteed products,
- managed futures and investment programmes,
- private equity/venture capital funds,
- real estate investment (REIT).

Hedge funds are currently the best known alternative investment institutions <http://www.nwai.pl>. Their evolution was a consequence of the development of new

financial instruments, for instance, derivatives. According to BarclaysHedge (2013), a hedge fund is an alternative investment vehicle available only to sophisticated investors, such as institutions and individuals with significant assets <http://www.barclayhedge.com/research/educational-articles/hedge-fund-strategy-definition/what-is-a-hedge-fund.html>. Institution Eurekahedge (2013) defines hedge funds as investment vehicles that explicitly pursue absolute returns on their underlying investments <http://www.eurekahedge.com/database/faq.asp#1>.

The name hedge fund can be given to an investment fund subject to less restrictive regulations, which invests investors' means in both the cash market and the futures market and uses leverage to benefit its shareholders. Hedge funds are mostly privately-owned companies that pool investors' money and reinvest it in many kinds of complicated financial instruments. Their goal is to outperform the market. Unlike mutual funds whose owners are public corporations, they are not regulated. For this reason they are very risky. However, it is exactly this risk that attracts many sophisticated investors who believe higher risk leads to higher return. Therefore, the name hedge fund is not appropriate from the point of view of legal forms under which the funds are created. The legal structure of the pool depends on the kind of investors and where the fund will be registered. The most common legal forms are limited partnership structure and limited liability company structure, which is why in this context as well the term 'fund' is used incorrectly.

In most countries, there is lack of a formal definition of funds of funds (FOF). According to Investopedia (2014) funds of funds are mutual funds that invest in other mutual funds. This method is sometimes known as 'multi-management'. A 'fund of funds' can be understood as an investment strategy of holding a portfolio of other investment funds rather than investing directly in traditional investments. A fund of funds may invest only in funds managed by the same investment company, or it can invest in external funds.

Structured products are a combination of traditional investments in stocks and bonds with investments in derivatives. The classic structured product consists of two components: a traditional debt instrument and a derivative. Examples of market bases that may constitute the basis for calculating the amount of interest payments include, for example, short- and long-term interest rates, exchange rates, stock indices (global or local), share prices or commodity prices (e.g. precious metals, energy, agricultural produce, etc.). The combination of traditional instruments with innovative instruments should enable investors to generate higher returns. A traditional instrument is designed to protect capital in an investment. A derivative is designed to redouble income. The creation of asymmetric payment profiles is possible by using, for instance, options. These financial vehicles have the task of adapting to the changing conditions of the financial market.

The concept of managed futures is often translated as managed accounts and investment programmes. In fact, the term covers a whole industry based on the advice of specialized consultants who use derivatives as a tool to develop profit. Therefore, this activity is linked with active investing in the futures market. The purpose of placing funds on the derivatives market is ongoing speculation that makes it possible to earn from changes in the prices of financial instruments in the

future and diversification of the investment portfolio. The term managed futures refers to the way of acting on the futures market through authorization of advisers to manage the money for the customer on the futures market. The concept of Commodity Trading Adviser, however, in the literal sense means an adviser on the commodities market; therefore, the term may be misleading. Commodities are associated with, for example, agricultural produce, precious metals, oil and many other physical assets that can form the basis of transactions in the futures market. In the terminology of finance, by contrast, the concept Commodity Trading Advisers (CTA) means professionals, called Licensed Professional Counsellors (LPC), on the futures markets, whose actions apply to foreign exchange markets, financial instruments and indices. Managers are supervised by an American institution which regulates futures markets (National Futures Association – NFA). A CTA licence is issued by the Commodities Futures Trading Commission (CFTC).

Definitions of the terms private equity and venture capital as well as their further interpretation are significantly different from each other, depending on their areas of application. According to the definition published by the European Venture Capital Association (EVCA), dating from 1995, private equity funds include investments in companies at various stages of development, from the foundation and commencement of operations through the stages of growth and expansion, until their resale. Defining the term private equity in general it can be said it means all investments in private equity in order to achieve medium- and long-term earnings from the growth of capital. In turn, the concept of venture capital means private investments that are situated in the early development stages. Therefore, it can be concluded that venture capital is one of the varieties of private equity. The term venture capital is most often interpreted as an investment in an entirely new venture, while private equity is an investment in an entity that already exists, whose financing aims to achieve further, more dynamic development. The concept of private equity is an expression much broader than venture capital, although it is often used interchangeably with venture capital.

Real Estate Investment Trusts are investment companies that invest exclusively in real estate and mortgages. A characteristic feature of REITs is to invest an average of 80 % of their assets directly or indirectly in real estate. A Real Estate Investment Trust may invest in buildings, shopping malls, apartments, hotels, resorts, self-storage facilities, warehouses, and mortgages or loans. The idea is that each REIT should have at least 10 properties in its portfolio, wherein one investor may have a maximum 10 % of the REIT's net assets. The attractiveness of funds is mainly due to tax benefits that an investor can obtain by investing in this fund. There are three types of REITs. The first type is Equity REITs, which buy properties that produce income. The second type is Mortgage REITs, which invest in real estate loans. The third type is Hybrid REITs, which usually make both types of investments. The characteristic feature of these investments is that by law 90 % of a REIT's taxable income must be distributed to investors.

Moving on to the next classification of alternative investments made by Schneeweis and Pescatore (1999), it can be seen that they divided alternative investments into four basic groups: hedge funds, managed futures investment,

commodities and traditional alternative investments. In this classification they also indicated that the goods which are often the subject of alternative investments include agricultural commodities, precious metals and energy. Traditional alternative investments include private equity funds, venture capital funds and real estate.

Stefanini (2006) divides alternative investments into traditional alternative investments, hedge funds, private equity and venture capital, securitization and physical assets. By enumerating the components of each category, he gave other elements than those that are included in Schneeweis and Pescatore's classification. The author classified junk bonds, emerging markets and real estate funds as traditional alternative investments. Physical assets include land, real estate, commodities, precious metals and oil.

An innovative yet controversial division of alternative investments was proposed by Swedroe and Kizer (2008). They divided alternative investments into good, vitiated, bad and the worst. The classification of each investment into one of these categories was based on the following criteria:

- expected rate of return on investment,
- investment volatility measured by the standard deviation,
- decomposition rate of return.

According to this classification categories of good alternative investments include real estate, inflation-protected securities, commodities, international equity issues, as well as stable value funds. Alternative investments with disadvantages are in the authors' opinions high-yield junk bonds, private equity, venture capital, covered calls, socially responsible mutual funds, precious metals equities, preferred stocks, convertible bonds and emerging markets bonds. Bad investment categories include hedge funds and leveraged buyouts. The worst category of alternative investments according to the authors includes structured investment products and leveraged funds. This classification presents a completely different perception of the alternative investments category.

Anson (2006) classifying alternative investments, specifies the following:

- hedge funds,
- commodities and managed accounts,
- private equity,
- credit derivatives,
- corporate governance.

The New World Alternative Investments institution (2009) divided alternative investments into hard investments, such as hedge funds, private equity funds, funds of funds and structured products, and soft investments – in real estate, art, people, equity schemes, franchises, etc.

Alternative investments are often understood through the prism of the applicable investment strategies that provide a wide range of opportunities to shape the profile of risk and return. With regard to the profiles of payment instruments we can distinguish different combinations, for instance:

Table 2.1 Comparison of conditions of doing business in onshore and offshore locations

Onshore location	Offshore location
Obligation to keep accounts	No obligation to keep accounts in most of these locations
Obligation to prepare interim financial statements	No obligation to prepare interim financial statements
Taxing entities in accordance with the regulations in force in the country	No taxes or liberal rules for the taxation of entities
Lack of anonymity of operating entities	Anonymity and discretion on the part of public offices
Interest rate rules for assets depend on economic conditions of the country	Beneficial interest rate rules for assets
Restrictions on obtaining citizenship in most countries	Relatively liberal rules for obtaining citizenship or permanent residence permit

- combination of traditional financial instruments with derivatives (usually structured products),
- the use of complex investment strategies that use short selling, leverage and many other previously unavailable combinations of investing techniques and styles,
- the use of mechanical trading systems.

In addition, alternative investments can be classified according to the degree of liquidity. The least liquid alternative investments include venture capital investments or LBOs (leveraged buy-out funds). Investments in hedge funds belong to relatively liquid investments. The investment horizon usually spans from 3 months to 1 year. One kind of investment with high liquidity is Managed Futures.

Among alternative investments, investments located ‘onshore’ and ‘offshore’ can be distinguished. A comparison of conditions of doing business in onshore and offshore locations is presented in Table 2.1.

Originally the concept described islands located off the coast of Europe and America, e.g. the Isle of Man or the Bahamas. Nowadays, the name is historical though the territories referred to as tax havens are also located far from the shore. The most famous offshore jurisdictions include the Bahamas, the Cayman Islands, the British Virgin Islands, Niue, the Isle of Man, Jersey, Cyprus, Malta, Gibraltar, and Ireland, as well as the states of Idaho and Delaware in the United States. States with liberal tax and legal regulations related to the conduct of business also include Lichtenstein, Luxembourg, Switzerland, the territory of Hong Kong and Hungary. A common practice is that institutions offering alternative forms of investment are created in places with liberal tax regulations and low requirements for business registration.

2.3 The Essence of Alternative Investment in Today's Securities Market

Alternative investments belong to the category of modern financial innovations. This category of investment is the result of the continuous evolution of the international financial market as well as the consequence of market changes. The progressive integration of international financial markets has caused a decline in the attractiveness of traditional forms of investment. Lowering interest rates by central banks around the world in order to stimulate the economy caused a decrease in interest rates on deposits. This situation prevented investors from generating attractive rates of return by using traditional forms of investment funds. Additionally, it triggered a search for new opportunities for the allocation of financial surpluses in order to achieve superior returns on invested capital.

The increased interest in the category of alternative ways to invest capital was particularly visible in the years 2000–2002. This period was characterized by a tendency towards falling prices in financial markets. The FED policy of cheap money conducted in the United States from 2000 caused a reduction of interest rates to the lowest level over the past 40 years. On the one hand, the decrease in short-term interest rates to 1 % in the U.S. in 2003, and a decrease in the interest rate of bonds below 4.2 % in 2005 led investors decisively to seek forms of investment offering a chance to achieve higher income. On the other hand, there was interest in investments that enable effective diversification of the investment portfolio.¹

It should, however, be pointed out that there are dangers connected with this very dynamic development of the market segment. Undoubtedly, alternative investments are complex transactions concluded on the market with reduced information requirements and low transparency. The consequence of this is the lack of a reliable assessment of the risks that could be caused by these transactions. The use of complex investment strategies using lever action, which triggers a significant amount of capital, composes a challenge for the security of the entire financial system. The increase in investor interest in the subject of alternative investments was also sparked by the financial crisis in 2007, which provoked an analysis of its causes. It would be unjustified to say that it was caused by financial innovation. In fact, innovations are, and will be an integral part of the international financial market. Moreover, the task of supervisors and regulators is to adjust the regulatory and organizational architecture to the changing conditions.

Due to the growing interest of investors investing in the international financial market interest in alternative investment strategies has also increased. The first alternative investment fund was created by Alfred Winslow Jones in 1949. The sociologist used the method of short selling, which allows investors to make money in the event of a fall in prices on the market. In fact, a short sale means the sale of hypothetical assets for later repurchase at a lower price. In practice it means lending

¹ Research on complex portfolio diversification opportunities for traditional instruments by using alternative investments was led by: Schneeweis et al. (1998).

assets valued too high, whose price, in all probability, will be reduced. The difference between the sale price and the purchase price is the investor's profit. This gain is reduced by the cost of borrowing the assets. Alfred Jones combined both long and short positions in the management of the investment fund. The sociologist assumed that a good selection of securities purchased allows profit above the average rate of return, while the use of leverage can multiply profits. Short positions in the portfolio reduce the potential gains from the portfolio during a period of rising prices on the market. However, they have the task of protecting the portfolio against losses were there to be a reversal of the market trend.

Despite the continuous extension of the spectrum of possible methods and techniques of investment and offers of financial instruments, the principles applied by Jones have not lost their universality. The development of a high rate of return is dependent to a great extent on the proper selection of securities for the portfolio.

In addition, the use of alternative ways to invest should enable investors to achieve positive returns regardless of changes in market prices. Another characteristic of alternative investments is based on the premise that achieving favourable investment results depends to a great extent on the manager's professionalism. He or she should possess a special ability to select appropriate instruments and use long and short positions that help to reduce risk and achieve a positive return.

2.4 Characteristics of Alternative Investments

Alternative investments differ from traditional investments in many aspects. Comparing alternative investments to traditional investments, it is worth using a table that summarizes the basic differences between these categories of investments (Table 2.2).

The most important distinguishing characteristics of alternative investments compared to traditional ones include striving to achieve absolute returns, active management applied by the managers of such investments, the use of complex investment strategies as well as opportunities for portfolio diversification and the use of arbitrage. Moreover, in the case of hedge funds, which are a very important class of alternative investments, we are dealing with a two-stage system of remunerating managers. In view of the importance of these features, they will be described in the following paragraphs of the book.

2.4.1 *Absolute Return*

We can understand the rate of return to be the size of the profit earned from the investment to the value of the capital employed. The rate of return (in other words, profitability) is the basic characteristic of income and one of the basic characteristics of investment.

Table 2.2 Alternative versus traditional investments

Alternative investments	Traditional investments
Absolute performance objective	Relative performance objective
Common usage of leverage	None or limited usage of leverage
Efficiency of investment dependent primarily on alternative investment manager skill	Efficiency of investment dependent primarily on market returns
Low to medium correlation with market indexes historically	High correlation with market indexes historically
Usually high value of minimum investment	Usually none or low value of minimum investment
High fees, which usually include performance and management fees for professional management	No performance fees but may include fixed management fees for professional management
Less regulation of the market	Strict regulation of the market
Tend to deliver higher returns even during a bear market	The return delivered mostly during a bull market
High volatility of returns	Relative stability of returns
Absence of information regarding valuations and pricing	High transparency regarding valuations and pricing

Firstly, as we have mentioned, the main goal of these investments is to achieve the objective of absolute performance. It means that they do not aim simply to achieve the level of profit determined by benchmarks, but to beat the level designated by benchmarks. The second objective is pursuing alpha. An alternative investment strategy should generate alpha returns. In a large part, it depends on how alpha is defined. If beta-risk is well-defined and accurately measured, then in efficient markets, alpha is hard to find. The level of profit is determined by managers’ knowledge and experience of these investments. In case of traditional investments the performance objective is relative.

The absolute rate of return that those managing alternative investments aspire to is often an unlimited rate of return. It means that managers do not focus on market risk measured by the beta coefficient, but on the alpha coefficient. The alpha coefficient is the intercept of the estimated linear regression equations proposed by Jensen (1968), designed to evaluate the management of the investment fund:

$$\alpha_i = R - [R_f + \beta_i(R_m - R_f)] \tag{2.1}$$

where:

- α_i – Jensen’s Performance Index, called Jensen’s alpha,
- R – the rate of return achieved by the fund in the analysed period,
- R_f – rate of return on risk-free investment, called the risk-free rate, achieved in the analysed period,
- R_m – rate of return on risky investments (usually stocks), called the rate of return on the market, achieved in the analysed period,
- β_i – beta coefficient of fund portfolio.

Jensen's Alpha is based on the Capital Asset Pricing Model (CAPM). It is the difference between actual returns of a fund and those that could have been earned on a benchmark portfolio with the same amount of market risk. Jensen's Alpha measures the return earned by a portfolio above or below that demanded by the market for its risk class. According to Stefanini (2006) alpha consists of four elements:

- traditional beta – where the sources of return are the stock market, bond duration and credit spread;
- alternative beta – where the sources are liquidity, volatility, correlations, the risk inherent in corporate events, beta of commodity markets and complexity inherent in the modelling of corporate events or structured products;
- structural alpha – which is linked to the structural advantages enjoyed by hedge funds, for example the greater regulatory freedom, the latitude offered by having no benchmarks, flexibility and nimbleness, and limited size;
- skill alpha – which is linked to the manager's talent and represented by his analytical skills, the ability to produce fresh ideas, portfolio management and risk management skills.

Alternative investments are characterized by a very wide range of investment opportunities, by offering multiple combinations of risk and return widely available using traditional methods of investing. Understanding the possibilities of shaping the profile of risk and return by the management in the context of alternative strategies is one of the key aspects of alternative investments.

2.4.2 Active Management

The goals of alternative investments are connected with return objectives and risk parameters. The return objectives are achieved through active management. Portfolio management strategies are divided into

- active,
- passive.

Active strategies assume a construction of a portfolio based on the assumption of financial market inefficiency. The most common methods of active management are fundamental and technical analysis. Active investment depends on formulating expectations regarding the development of prices and rates of return from financial instruments. The strategies are burdened with a higher risk compared with passive strategies; however, thanks to this, there is an opportunity to achieve above-average investment returns. Passive strategies are based on the assumption of market efficiency, which means it is not possible to achieve above-average profits because all information is automatically discounted in prices. Passive strategies are based on the transactions of purchase/sale of financial assets assuming a long investment horizon. The basis for the creation of the portfolio is replicating stock market

indices and it is changed depending on preferences, needs and investment objectives. The purpose of the passive strategy is to design a portfolio and to achieve the maximum benefit from the assumed level of risk. The benefits of this strategy are primarily to reduce fluctuations in prices, ingredients and value of the entire portfolio as well as to minimize the risks arising from the inappropriate selection of assets to the portfolio. The alternative investment managers aspire to achieve absolute returns from the portfolio by using active strategies.

2.4.3 Diversified Investment Strategies

The successful implementation of an alternative investment strategy depends mostly on an investment manager's skill and experience due to the broad range of investment opportunities. The most significant impact on investment results is made by proper asset allocation. The asset allocation through alternative investment should optimally fulfil investment objectives. The managers of alternative investment can apply sophisticated investment strategies which generally should be long-term in nature and should avoid ad hoc decision-making based upon short-term factors.

From the managers' point of view the first goal of alternative investments is to add return strains that are diversifying to a portfolio because they are not correlated with market-based exposures. Achieving satisfactory investment results is connected to a great extent to the unique characteristics and skills of fund managers (Connor and Woo 2003).

Those managing alternative investments often use leverage in order to maximize profit. However, it is a double-edged sword because in the event of assuming the wrong direction of price changes it will lead to a multiplication of losses. The use of leverage is particularly associated with derivative instruments which are used within a variety of investment strategies. In the case of traditional investments, leverage is not used or is used at most to a very limited extent. Achieved return from traditional investments results from the increase in prices of instruments in the future. In the case of alternative investments, investors can make a profit even during price declines. This is primarily because of the possibilities offered by derivatives. Through the sale of forwards/futures, as well as the use of appropriate strategies in options, it is also possible to gain in the event of a drop in market prices. The use of a particular investment strategy defines the character and the level of risk assumed within a given investment.

L. Jaeger (2002) says that thanks to alternative investment strategies a sub-category of alternative investments has been created that comprise all investments except investments that are traditional in nature.

Strategies in the financial market are very different depending on the group of investors applying them. The basic difference is the intensity of the actions taken and the degree of risk incurred. The use of strategies characterized by different profiles of risk and return is possible due to the use of tools such as financial

leverage, short selling and the usage of derivatives. The investment strategies applied in alternative funds should enable investors to achieve attractive rates of return regardless of the direction of price changes on the market and a low correlation with traditional asset classes. The range of instruments and techniques for designing strategies with different levels of risk and potential return goes far beyond the traditional instruments such as stocks or bonds. Knowledge of applicable strategies is the foundation for enabling a coherent long-term investment plan. Inappropriate use of investment strategies is associated with the probability of severe losses incurred. It can be assumed that the common elements of applied investment strategies include the following (E. Sokołowska 2010):

- the techniques of arbitrage,
- use of leverage,
- use of short selling, which allows investors to earn money on declines in market prices,
- the use of derivatives and active investment in futures markets,
- the use of a very wide range of underlying instruments which are the subject of investment (financial instruments, commodities, precious metals, real estate),
- investing in markets characterized by high volatility,
- participating in mergers and acquisitions.

2.4.4 Diversification of Risk and Arbitrage Opportunities

Alternative assets can also play an important role in diversification of an investment portfolio. One of the active methods of reducing risk is to build a portfolio. Its essence is to diversify risk, i.e. its distribution to constituents of the portfolio that differ from each other. The theory of the portfolio was created by Harry Markowitz (1952). To be able to understand it well the concept of correlation should be explained. Correlation is a reciprocal connection of two phenomena. Correlation occurs when a change in one phenomenon modifies the second one. No correlation means there is no connection between the phenomena.

Portfolios consisting of a small number of assets may be characterized by high risk. This is reflected by the high value of variance. It is possible to reduce the variance of portfolio return by complementing the portfolio with supplementary assets. This principle is called diversification. The effect of diversification is typically measured by the variance of the portfolio.

It is expressed as follows:

$$\delta^2 [E(r - \bar{r})^2] \quad (2.2)$$

where:

δ^2 – the variance of the portfolio,

r – rate of return,

\bar{r} – average rate of return.

Assuming that the rates of return on individual assets are not correlated, the variance of the rate of return on the entire portfolio will be equal to:

$$\text{var}(r) = \frac{1}{n^2} \sum_{i=1}^n \delta^2 = \frac{\delta^2}{n} \quad (2.3)$$

where:

$\text{var}(r)$ – variance of the rate of return,

n – the number of components of the portfolio,

δ^2 – the variance of the portfolio.

A few different financial instruments should be placed in the portfolio to create a well-diversified one; however, it should be borne in mind that an excessive number of instruments in the portfolio may interfere with their analysis and management. With the increase in the number of assets in the portfolio, the value of the variance decreases. A perceptible improvement in the variance of the portfolio is visible after placing about six different assets in the portfolio (Luenberger 2003). If the rates of return are positively correlated, a reduction in the variance of the portfolio is much more difficult.

An important fact is that diversification of the portfolio is more effective the lower the value of the correlation coefficient between the rates of return of the portfolio components. The highest benefits of playing the portfolio are achieved when the correlation coefficient of the portfolio components is exactly equal to minus one. Good diversification of the portfolio is that in which the portfolio includes instruments from different markets where the correlation (the influence of the price of one instrument on the price of a second one) is close to zero. The economic justification results from a variety of risk factors affecting the assets. If the assets in the portfolio are subject to the same risk factors (shares of two companies in the same industry), then the diversification of the portfolio is impossible. Alternative investments can play the role of assets in the portfolios that enable effective portfolio diversification. Their prices vary often in a different direction than the prices in the financial market.

The term uncorrelated assets covers the whole range of potential investments including real estate, commodities, but also alternative investment strategies. The degree of correlation indicates the strength and direction of changes in the prices of individual financial instruments. Investment strategies that use a negative correlation of price changes of individual financial instruments can be used by investors to neutralize the risk of investment and hedge against a decrease in value of the portfolio in the event of price declines in the markets. Diversification of the portfolio and supplementing it with alternative investments should enable the protection of all its value. Minimizing losses associated with a decrease in the

value of the portfolio is one of the fundamental characteristics of alternative investment strategies. Correlations between alternative forms of investment and traditional investments are generally weak.

For the investing entity AIS (Alternative Investment Assets) this means the presence of broad opportunities to reduce portfolio risk. It is one of the most important advantages of alternative investments. However, correlations are not constant during the period. Moreover, there is often an increase in the correlation coefficients, for instance market situations where many funds begin to invest in the same opportunities.

Additionally, alternative investments allow benefits to be gained from the use of arbitrage. Arbitrage is a transaction whose goal is to gain a profit without risk by using inefficiencies in the market. The most classic example of arbitral opportunity is the difference in the valuation of the same security listed on various stock exchanges. Investors looking for easy gain will buy value on the 'cheaper' market, and then immediately resell it where the valuation is higher. In this way they can earn not from the movement of prices resulting from technical or fundamental analysis, but from the normal lack of cohesion in current market conditions. The persons who conduct the arbitrage occupy opposite positions in related markets, trying to make gains from pricing anomalies for similar instruments.

2.4.5 Two – Tier System of Rewarding Managers

An important element with a significant impact on the functioning of alternative investments – particularly hedge funds – is the association of managers with hedge funds through financial participation in the fund as well as their investment skills that generate additional alpha (Connor and Woo 2003). However, the price to be paid for the hope of high profits is much higher margins including both the initial commissions and interest commissions for the management of the investment portfolio. A characteristic feature of alternative investment is the operation of a two-stage pay system for managers. The management fee is deducted from the value of the rates of return before their publication. The commission from the generated profit enables the establishment of a strong relationship of fund managers with the fund. Managers investing their own funds is a good protection against the occurrence of mechanisms characteristic of agency theory in which investors and those investing have different purposes. The fee for the achieved results is usually paid after reaching a particular profitability threshold or after making up for losses in the fund arising from previous periods. Hedge fund managers typically receive both fund management payments and commission from the performance of the fund – also called incentive fees. A typical hedge fund manager will charge '2 and 20'. This term refers to a management payment of 2 % of the net asset value of the fund, and an incentive commission of 20 % of the profit generated by the fund. Management payments are generally from 1 to 4 % per year (typically 2 %), but are calculated and paid every month or every quarter. Fund managers' business models

provide for management payments to be used to cover the manager's operating expenses, leaving the performance fee for employees' bonuses. In large hedge funds, management fees can be a significant part of the manager's profit.

Commissions for the achieved results are also one of the characteristics of alternative investments. The commission is calculated as a percentage of the profit earned by the fund. Generally, the commission is about 20 % of the profits. However, these charges cover a wide range and the well-known managers charge a much higher fee. For instance, in the SAC Capital Partners' fund the incentive commission comes to 35–50 %, while Jim Simons of the Medallion Fund charges 45 % of the profit. The incentive commission model has been criticized repeatedly as a cause of excessive risk-taking by fund managers in order to achieve short-term profit. Managers should be oriented towards the implementation of long-term investment strategies.

Goetzmann, Ingersoll and Ross (2003) made an attempt to analyse the potential costs and benefits of the high-watermark system from the point of view of an investor. There are various models of commission structures, but the best known systems are

- high watermark,
- hurdle rate.

A high watermark in the literal sense means a sign of high water above the highest level that the water body has reached during a certain interval of time. The term is often used in a figurative sense to determine the highest level of a variable. In relation to the hedge fund industry, the term is used in conjunction with management remuneration. It means that the manager will receive positive performance fees if the market value of the funds exceeds a certain established level. Therefore, when calculating the commission the net asset value of the fund in the current year is compared with the net asset value of the fund in the previous year. The commission is payable if the current net asset value (NAV) is higher than the historical maximum value of these assets.

On the one hand, high water mark agreements are important from the standpoint of investors' interests because the incentive fees are paid only when certain conditions are fulfilled. On the other hand, this mechanism may lead to managers taking a higher risk and to greater variance of returns from such funds. The table presents the mechanism of the High Water Mark commission system. A simplified diagram shows that in 2009, despite an increase in net asset value from 110 to 130 million USD, incentive fees would be paid to the amount of 2 million USD because the value of 130 million USD is 10 million higher than the highest net asset value of 120 million USD achieved by the fund in previous periods. Such a construction of the commission mechanism aims at directing managers towards achieving long-term investment objectives. However, the mechanism is not devoid of faults. It could happen that a manager who suffered significant losses may withdraw from managing that particular fund without severe consequences (Table 2.3).

Table 2.3 The mechanism of the high-water mark commission system

Year	Net asset value (millions USD)	Change in net asset value (millions USD)	The value of commission (millions USD)
2006	100	–	–
2007	120	+20	$0.2 \times 20 = 4$
2008	110	–10	0
2009	130	+20	$0.2 \times 10 = 2$

The hurdle rate is another well-known mechanism for incentive fees payment. The hurdle rate is generally defined as minimum rate of return on investment. In the system of remuneration of hedge fund managers it will define the level of rate of return that a hedge fund should reach in order that the managers could receive an additional commission. Therefore, this mechanism consists in collecting commission by fund managers, based only on the achievement of performance above a pre-established reference standard called a benchmark. Therefore, payment of commission is made on exceeding the reference rate such as LIBOR (The London Interbank Offered Rate) or another predetermined benchmark. In the case of a mechanism called a ‘soft’ hurdle, the commission is calculated on the basis of the annual total rate of return. In the case of a more restrictive mechanism called a ‘hard’ hurdle the level of commission is calculated on the basis of the level of the rate of return exceeding the benchmark.

The immediate withdrawal of cash invested in the fund is not possible. Most funds specify in advance the so-called barriers to entry and exit from the fund. Each hedge fund has separate rules relating to possible withdrawal from investment, which could be a month or even a period ranging from 3 to 5 years. Clauses that prevent the rapid withdrawal from investments are called lock-ups. Some hedge funds collect commission from investors for redemption of shares – fees for withdrawal from the market – if the investor intends to withdraw funds early from the fund. Payment for redemption of shares in the fund is often collected only for a certain period – usually 1 year – from the date of investment. The purpose of the commission for redemption of units is to discourage investors from short-term investment in the fund as well as to prevent the withdrawal of means in the fund after a period of adverse investment outcomes. In contrast to charges for fund management and incentive commission, payments for redemption of shares are collected and stored by the fund and increase other investors’ capital. Therefore, they are not a supplementary commission paid to managers.

2.5 The Specificity of Alternative Investment Market Regulation

In most countries of the world, until recently, there was no precise regulation that allowed the rules of the sector of alternative investments to be established. Moreover, in most countries there was no supervision of the alternative investment segment by financial market bodies. Alternative funds are entities that have no obligation to provide information on performance results. Additionally, there is no regulation imposing an obligation on the auditor to follow up the financial statements.

The places where alternative funds are registered are generally jurisdictions that typically have liberal laws and favourable tax rules. The evolution of the market of alternative financial investments as well as their international nature pose a serious challenge for supervisors. Creating innovation brings with it many potential risks. The regulations applicable in this market segment are associated with the need to ensure the safety on both the microeconomic and macroeconomic scale.

Financial markets are subject to regulation for three reasons: to increase the availability of information to investors, ensure the stability of the system and strengthen the control of monetary policy (Mishkin 2002). Therefore, it is important, on the one hand, to ensure the safety of investors and other entities operating in the market, and on the other hand to create a legal framework contributing to an increase in the stability of the entire financial system. The progressive integration of financial markets makes necessary the continuous monitoring of trends occurring therein as well as the adjustment of regulation to changing conditions. There are three types of rules governing the functioning of the financial system:

- regulations laid down by the applicable law,
- standards created by the subjects of the financial system,
- historically formed customs.

The greatest controversies are raised by the issue of regulation of the hedge fund industry, often described as alternative funds. Due to the global nature of alternative investments the issue of their regulation is increasingly raised at the international level. The creation of an appropriate regulatory framework for the operation of the market is primarily aimed at the following:

- protection of investors against fraud in the financial market through licensing and registration,
- increasing the transparency of the alternative investment sector,
- ensuring the safety of the distribution of products and services,
- ensuring the integrity of the financial market,
- systemic risk reduction,
- providing customers with high quality services and competitive prices of the products and services on offer.

The asymmetry of information in the financial markets means investors are exposed to problems associated with negative selection and the risk of abuse, which can destroy the effectiveness of operations. Therefore, appropriate regulations should reduce the problem of negative selection and risk of abuse in the financial markets, thus contributing to an increase in their effectiveness. The problem of asymmetric information may also lead to financial panic following the collapse of financial intermediaries. The inability to assess real threats prompts investors to withdraw their funds from both institutions at risk as well as those that are solvent. Consequently, such actions lead to significant losses on both the micro- and macro-economic scale.

The issue of increasing regulation of the sector is generally perceived negatively – too high a level of regulation can inhibit innovation and be a factor limiting the development of the alternative investment sector. In the literature there are different approaches to regulating the sector of financial innovation. Lamandini (2008) identifies four alternative options for activities related to the regulation and supervision of the alternative investment sector:

- lack of regulation of the sector,
- introduction of regulation of alternative funds,
- introduction of regulation of alternative fund managers,
- introduction of regulation at the level of investors.

In relation to the hedge fund industry we can discuss three possible forms of regulation (Crockett 2007):

- direct,
- indirect,
- market (by expanding the scope of available information and transparency).

The direct form of fund control is associated with far-reaching interference in their activities and can lead to a significant reduction in the activity of alternative funds. Indirect regulations are designed to control the involvement of institutions cooperating with hedge funds (banks, pension funds, insurance companies), and the risks they take. Market regulations relate to the increasing transparency of alternative funds by making their activities more explicit, as well as through a broader range of disclosures regarding actions carried out by these entities.

The literature provides a number of arguments for the introduction of separate regulations and the creation of alternative investment sector supervision, as well as some that are against such solutions. In the American literature only a slight tendency can be observed to form a regulatory system, because of the dominant attitude that it would limit the creation of this sector. Many studies indicate that the introduction of alternative investment sector regulation is not only unnecessary but harmful to the domestic capital markets as well (Oesterle 2006).

Some research suggests that not only should the regulations for newly created funds not be tightened, but that any regulations that could hamper their development should be completely abolished. These ideas are supported by identifying the positive consequences of the absence of regulations, for instance, the opportunity of

more flexibility and effectiveness of investment strategies, faster response of entities to possible changes in the market, along with the more effective use of market trends. These activities are in effect to lead to higher rates of return on investment. However, in the studies it is indicated that indirect control of the sector would be justified, e.g. control of banks that are partners of hedge funds. Many investment banks are linked by capital to hedge funds.

On the other hand, the results of a survey conducted in 2007, covering 2,937 hedge funds from 24 countries around the world, indicate that a lack of regulation could cause oversight and motivate managers of investment funds to conceal investment plans (Cumming and Dai 2010). The studies also point to the need for requirements related to the introduction of the obligation to have a minimum level of capital, limits on the activities of funds to local centres, and distribution to private placement.

It is commonly said that one of the causes of the crisis on the financial markets in 2007, considered to be more severe than that of 1929, was the development of financial innovation. Creating complex financial structures undoubtedly complicated the functioning of financial markets and made it extremely difficult to control capital movement. It can be assumed that one of the causes of the sudden market deterioration was the lack of appropriate regulations governing the financial innovation market. The financial crisis has clearly highlighted a number of weaknesses in the financial system. It seems to be justified in this situation to conduct a detailed analysis of the regulatory and supervisory framework for all significant actors in the financial markets. Comprehensive analysis of the existing solutions in different countries should show the weaknesses of the current system and indicate possible directions of change which on the one hand would not impede the development of the market, while on the other hand would ensure the safety of its participants.

The capital market in the U.S. is regulated by a number of legal acts. The federal investment law consists of laws that are designed to ensure access to a safe capital market. At the same time, these acts contain some gaps or provisions that exempt alternative funds (as well as operators in this market) from registering and reporting their activities. In this way financial institutions operate successfully on the fringes of the law. Acts which directly or indirectly relate to the activities of the alternative investment sector in the U.S. are as follows:

1. The Securities Act of 1933.
2. The Securities Exchange Act of 1934.
3. The Investment Company Act of 1940.
4. The Investment Advisers Act of 1940.
5. The Employee Retirement Income Security Act of 1974 (ERISA).
6. National Securities Markets Improvement Act of 1996.

Other regulations affecting the alternative investment sector are Blue-sky laws, which are a set of rules on the trading of securities, designed to protect investors against the acquisition of worthless securities. This law applies primarily to new issues of shares. Moreover, in 2002 the Sarbanes Oxley Act of 2002 (also known as SOX or SOA) was passed as a response to the loss of investor confidence in the

financial market as a result of the spectacular bankruptcies of companies such as Enron. Bankruptcies were related largely to the use of creative accounting suspicions. This resulted in a drastic decline in confidence in the boards of listed companies, auditors and financial advisers. The main purpose of adopting the SOX Act was the introduction of internal control in companies as well as the tightening of the requirements regarding the independence and transparency of entities operating in the financial market.

The Sarbanes–Oxley Act introduced fundamental changes associated with the financial services markets, as well as in the field of accounting, reporting and auditing. The act was designed to reform the Securities Exchange Act of 1934, which regulated key financial matters of public companies, which were critical for the U.S. economy. Due to the significant commitment of capital from the United States in the whole world, as well as advancing globalization processes, it is expected that the consequence of the introduction of the act will be its impact on many other economies in the world.

At the European Union level, the idea of introducing a ‘common passport’ in the context of hedge funds was discussed in 2004 in the debate on the introduction of common rules for this market segment (Commission of the European Communities, COM 2005). Specific regulations introduced by individual member states intensified the fragmentation of the market. Due to the lack of concrete action on the functioning of the alternative investment sector several Community states embarked on individual regulations concerning mainly hedge funds and funds of funds. The countries that have introduced individual regulations are France, Italy, Luxembourg, Spain, Ireland and Germany. The resolution of the European Parliament in January 2004 recognized the lack of an appropriate legal framework and identified the need to mitigate the current regulatory regime, which should help to bring to the community funds operating in offshore tax havens.

The activity of unit trusts was regulated in the EU Member States by the Directive Undertakings for Collective Investments in Transferable Securities (UCITS). A fund that offers public shares, invests in transferable securities, which are traded on regulated markets, as well as selling and redeeming units at the request of the investor, is classified as a UCITS fund and can be distributed in all Member States.

In turn, the Directive UCITS III regulations apply to investment funds intended for retail investors. They include two main directives: the directive on management companies (2001/107/EC) and the so-called product directive (2001/108/EC). The European passport makes it possible to use the authorization obtained in one European Union state and to offer one’s products in the rest of the Community. Directives governing the activities of trusts play an important role due to precise rules determining investment policy, minimum capital requirements, depositing of assets and supervision by an independent depositary provider. In addition, there are many supplementary provisions governing the activities of unit trusts. An important act regulating financial markets in the European Union is the Directive on financial instrument markets MiFID. It should also be noted that since 2007 all credit institutions and investments are subject to the Capital Requirements Directive.

The directive requires all institutions to create minimum capital reserves as capital collateral.

Alternative funds are referred to in the EU as non-UCITS funds. Alternative funds, taking various legal and organizational forms, are not subject to the recently unified regulation in the European Union and, consequently, there was no uniformity regarding the possibility of offering participation in such investment projects in Member States other than the Member State of establishment.

In the European Union there are no directives that regulate the alternative investment industry in a direct way. The directive mentioned above affects the alternative investment industry only indirectly. This means the asset managers of alternative funds are required to register and disclose their names in the Member States. Moreover, managers are also required to report regularly on their activities in the country of registration. At the end of May 2009, the European Commission presented proposals to regulate the activities of alternative funds such as hedge funds and private equity. The actions of the European Commission were inspired by the financial crisis in Western countries. The aim of the project was to establish a secure and harmonized Community framework, which would apply to monitoring and supervising the risks which can be generated by alternative investment fund managers. Changes in EU legislation aimed at avoiding risks to financial stability for investors, contractors and other financial market participants.

In 2011, the European Union developed a directive (2011/61/EU) defining their own standards, similar to SOX. The directive creates a European level framework regulating internal and external supervision as well as the operation of alternative investment fund managers in order to monitor and supervise the risk which can be generated by managers of alternative investment funds. Moreover, it allows managers, on fulfilment of certain requirements, to provide certain investment services and to offer alternative investment funds across the European Union. As a consequence, the directive creates an internal market AIFM based on a harmonized and stringent regulatory and supervisory framework. It enables all managers of alternative investment funds having a registered office in a Member State or having their registered office in a third country, to operate on the territory of the European Union.

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