PRACE NAUKOWE AKADEMII EKONOMICZNEJ WE WROCŁAWIU
Nr 1176 — 2007

Inwestycje finansowe i ubezpieczenia
– tendencje światowe a polski rynek

Krzysztof Jajuga

Wrocław University of Economics

ON SOME TENDENCIES IN ALTERNATIVE INVESTMENTS

1. Introduction

The field of investments is the one of the most important areas of economics, particularly of modern finance. This importance can be seen in theory and practice. On one hand, many advanced methods and tools were proposed by theoreticians; on the other hand, practitioners look for more attractive opportunities to invest in. Some of the most important changes related to investments, observed on financial markets, are:

1. Globalization – due to strong connections between markets in different countries, there is large impact of the significant events taking place in one country on the behavior of the market participants in the other country. This was evident during many events, including Asian crisis in 1997, attack on WTC in 2001 etc.

2. Deregulation – the legal barriers preventing flow of capital between different segments of the financial market and between markets in different countries have been lifted.

3. Disintermediation – this means that it is possible to perform the transactions on the financial market, directly through available technical means, rather than using financial intermediaries.

4. Securitization – by this we mean the process of converting non-tradable and non-negotiable financial instruments being two-party contracts into securities which are traded in the financial market and which have rather high liquidity.

5. Technological development – it occurs mainly in the area of computer technology and telecommunication, which makes available the access to financial markets in the whole world from different physical places; it also refers to the development in media, leading to growing world-wide interest in the financial markets.

6. Integration of the markets of different countries – the most spectacular examples of this process are mergers of stock exchanges and derivatives exchanges, for example establishing Euronext-LIFFE, consisting of five component exchanges, and recent merger of this exchange and the New York Stock Exchange (being the largest exchange in the world).

7. Occurrences of new investment possibilities on the financial markets – these possibilities are simply financial instruments, which are more sophisticated and more difficult to analyze, but on the other hand, they are tailored to the needs of the particular customers.

8. Increasing importance of pension systems – due to the increasing longevity risk and low fertility, functioning of pension systems based on capital market seems to be crucial condition for the safety of public finances of many countries, particularly in European countries. These pension systems have become the main institutional investors in many financial markets.

9. Dynamic development of unregulated financial sector – this particularly refers to hedge funds, which are important investors due to some asymmetry in legal regulations concerning institutional investors.

10. Increasing importance of derivative instruments – this is the impact of growing risk and the emergence of new types of risk on the financial markets.

11. Innovations – this refers to new instruments and new processes on the financial markets; they are designed for two reasons: to increase the competitiveness of the particular financial institution and to meet the needs of particular investor or customer.

12. Increasing role of institutional investors – these investors, namely: banks, insurance companies, pension funds, investment funds and investment companies took the substantial share in the transactions on the financial market when compared to individual investors.

13. Dynamic growth of knowledge applied in practice – since financial practice requires more advanced knowledge, this stimulated the new theoretical solutions being applied in practice.

14. Growth of education in the area of financial markets – due to more sophisticated financial tools used in financial practice, investors and the other participants on the financial markets are today better educated than in the past.

15. Growth of private wealth – due to the increased welfare, private funds flow in large scale to the financial markets.

Some of these facts resulted in the growth of the so-called alternative investment markets. This paper gives the description of this class of investments, as well as it outlines some tendencies in this area.

2. Alternative investments – general issues

Before going to the description of alternative investments, we propose to distinguish the following types of investments (traditional and alternative):

– investment in real assets;

– investment in debt or equity instruments (bonds, money market instruments, stocks); these are traditional financial investments;

– investment in index, which corresponds to portfolio of assets; here typical example is purchase of investment fund share (reflecting the portfolio of financial investments);

– investment in derivative instruments, where underlying index refers to single asset or portfolio of assets; here typical example is investment in stock market index futures, currency futures or stock futures;

– investment in derivative instruments, where underlying index has no link to portfolio of assets (so this index itself is not investable);

– investment in hybrid instruments, usually being the combination of debt instruments and options.

As one can see, this is the classification with respect to asset. It is also worth to mention, that derivatives consist very important class of investments. Its main feature for investors is leverage, which leads to higher expected returns and higher risk.

The second proposal to classify investments is the one into the following three classes:

– direct investment in an individual asset;

– direct investment in index (being portfolio of assets or some abstract index);

– indirect investment in some fund (for example investment fund).

Now we turn to the description of alternative investments, given by Yau, Schneeweis, Robinson and Weiss [3]. Some review of this class of assets is given also by Aronson [1] and Jobman [2].

Alternative investments consists of groups of assets with return and risk characteristics significantly different from those of stocks and bonds.

Therefore, the most important characteristics of alternative investments are related to return and risk, namely these investments have usually higher return and higher risk than traditional investments (stocks and bonds).

The main features of alternative investments are:

– relative illiquidity – this leads to higher return as the compensation in the form of liquidity premium;

– diversifying potential to a portfolio of stocks and bonds;

– higher due diligence costs (by which we mean cost of investigation of the details of investments);

– difficult performance evaluation due to the unavailability of benchmarks.

Alternative investments are attractive for portfolio managers for two reasons:

– they lead to better diversification of portfolio;

– they provide opportunity to apply active management skills of portfolio manager.

According to this we can provide another classification of alternative investments:

– investments providing exposure to risk factors not available through traditional investments;

– investments providing to specialized investment strategies (value added depends on skills);

– investments combining features of prior two groups.

Portfolio managers believe that alternative investment markets are less efficient than traditional bond and stock markets. This means that available information is not fully and immediately reflected in the price of instrument, which leads to the opportunity of abnormal profit from active investment strategy.

Due to their features, alternative investments have become important part of investment portfolios. There are however, problems related to the use of such investments in practice. One of the most important issues is related to modeling of return and risk of alternative investments.

The most important tool used here is some kind of pricing model. The analysis of different types of investments suggest at least four different driving forces for values of investments:

– value of investment is determined as present value of future cash flows from investment;

– value of investment is determined through no-arbitrage model;

– value of investment is determined through the specific model.

The first two cases refer to classical investments in financial instruments. Strictly speaking, value of stocks and debt instruments is determined as present value of future cash flows, whereas the value of many derivative instruments is determined by no-arbitrage valuation. But there are many types of investments, where one cannot use these two models and has to develop particular model. This model depends on the nature of the underlying process. Here there are three possibilities:

– values of underlying process are determined independently of the market – for example this could be index of temperature;

– values of the underlying process are determined solely by supply and demand process – for example for commodities;

– values of the underlying process are determined by demand side, particularly by the willingness of the buyer to pay the respective price – for example for art.

The other important problem related to the use of alternative investments in practice, particularly in investment portfolio, is the determination of volatility of asset and correlation with other assets. The market of alternative investments is usually not so liquid; there is no almost continuous trading, as in the case of traditional financial investments. Therefore one cannot rely so much on past data while calculating volatilities and correlations.

3. Real estate as a class of alternative investments

There are very many classes of possible alternative investments. We concentrate here on these classes that gain very large popularity in the world markets. These are:

- real estate;
- commodities;
- private equity;
- distressed securities;
- hedge funds;
- managed futures.

Real estate is the most important class of alternative investments. Until the beginning of nineties, when using term "alternative investments" people on the market meant solely real estate. Now the diversity of alternative investments is large, however real estate is by no doubt the largest group of alternative assets. It is estimated that real estate represents 1/3 to 1/2 world's wealth. At the end of 2005 real estate accounted for about 1/3 of total assets of US households.

There are two types of real estate investments (strictly speaking, investments in real estate market):

- direct investments – these are investments in physical property;
- indirect investments – these are investments in financial instruments related to physical property.

These types can be further classified. Among direct investments we distinguish: investments in residences, investment in commercial real estate and investment in land. Among indirect investments we distinguish: investments in equity instruments, investments in debt instruments and investments in derivative instruments.

As far direct investments are concerned, it is worth to mention the main features, some advantages and disadvantages. The main features of investments in physical property are: lack of liquidity, large lot sizes, relatively high transaction costs, immobility, and low information transparency. Another particularly important feature is heterogeneity which means that each property is specific and there is no standard tool of the analysis that fits to all properties. Instead individual customized tools should be designed.

The main advantages of direct real estate investments are: possibility of high leverage due to mortgage loans, control over property, geographical diversification, relatively low volatility. On the other hand, the main disadvantages of direct real estate investments are: lack of divisibility, high information costs, high commissions, substantial operating costs, risk of neighborhood deterioration.

All real estate investments provide exposure to risk factors not available through traditional investments. Direct real estate investments are, of course, investments in real assets.

On the other hand, indirect real estate investments belong to two types of investments: either investment in index, which corresponds to portfolio of assets or investment in derivative instruments, where underlying index refers to portfolio of assets. Let us describe briefly different types of indirect real estate investments.

The general classification of these investments corresponds to three main types of financial investments:

– investment in equity instruments;

– investment in debt instruments;

– investment in derivative instruments.

The most important investments in equity instruments related to real estate market are:

– investments in companies engaged in real estate ownership, for example: home builders and real estate operating companies;

– investments in equity real estate investment funds;

– investments in infrastructure funds – these are private investments in public infrastructure projects.

In all three cases value of the investment depends on the value of related real estate.

The most important investments in debt instruments related to real estate market are:

– investments in mortgage backed home loans;

– investments in mortgage backed securities;

– investments in debt real estate investment funds.

In all three cases value of the investment depends on the value of instruments backed by real estate. It is worth to mention that all these instruments are used as tools to finance the development of physical real estate market.

The most well-known investment of this type is mortgage back home loan. This is loan to finance purchase of a property, where property itself is collateral. Despite that this type of investment is related to the value of real estate, by many persons it is considered as classical investment in debt instrument.

Mortgage backed instrument is usually type of bond (more generally: debt instrument), in which cash flows are backed by mortgage. There are two main types of such instruments, depending on the geographical market, where they are traded. Those are Mortgage Backed Securities – MBS (traded mostly in US) and covered bonds (traded mostly in Continental Europe).

The rationale for the use of mortgage backed instruments lies in the transformation of illiquid assets (mortgage loans) into liquid securities (financial instruments), tradable in financial market. These instruments belong to the so-called secondary market of real estate financing, since they are used to finance mortgage loans. Another motivation for mortgage backed instruments comes from the fact that mortgage loans are exposed to interest rate risk, because cash flows from mortgage loans are not consistent with expected cash flows defined in mortgage loan agreement.

The main difference between MBS and covered bonds is such that in covered bond mortgage loans remain in the balance sheet of bank, and in MBS mortgage loans are sold to Special Purpose Entity being the issuer of MBS.

Similarly as in the case of mortgage backed loans, also these instruments are often considered as classical investment in debt instrument. On the other hand, investment in debt real estate investment funds can be considered as investment in index, which corresponds to the portfolio of assets.

The last and the newest type of indirect real estate investments consists of investment in the so-called property derivatives (real estate derivatives, property linked derivatives). Property derivative is derivative instrument, in which underlying index is real estate market index. Two types of indices can be used here: indices based on prices (values) of properties and indices based on returns from properties. Property derivatives are often used as risk management instruments, because they transfer risk related to property prices or to returns from properties. However, they could be also used as investment tools, since they allow for the exposure to real estate market without physical investment in property.

Property derivatives have generated even newer investment tools. These are structured products, being the combination of debt instrument and embedded option, where underlying index is real estate market index.

To conclude, it is worth to mention that real estate investments could be valuable components of the portfolio of investments, because they exhibit lower volatility than other assets (they are less affected by the short-term conditions) and relatively low correlation with the other assets.

4. Other classes of alternative investments

Real estate is by no doubt the most important class of alternative investments. Now we briefly describe some other classes of such investments.

Commodities

This is relatively homogeneous class of tangible assets. Similarly as for real estate we can distinguish here two groups:

– direct commodity investments – this is purchase of the physical commodity on the cash market or exposure to commodity price changes through commodity derivatives (mostly commodity futures);

– indirect – this is acquisition of indirect claims on commodities, like equities in companies specializing in commodity production; such investment does not lead to effective exposure to commodity price changes.

The most common types of commodity futures are these where underlying indices are prices of: agricultural products, metals and energy resources.

Private equity

It is ownership interest in a private (non-publicly traded) company, but generally it can be any security in which equity capital is raised via a private placement. There are two groups of possible private equity investments:

– direct investment, resulting in the flow of funds to the company needed financing;

– indirect investment through private equity funds.

Private equity funds are pooled investment vehicles through which many investors make investments in private companies. Basically we can distinguish two types of private equity funds:

– venture capital – equity financing of new or growing private companies;

– buyout funds – buyout of established companies through private equity funds.

The main features of private equity as investments can be described through comparing them with publicly traded equity. The main differences are related to:

1. Structure and valuation:

– private equity – deal structure and price are negotiated between the investor and company management;

– publicly traded equity – price is set in the market, deal is standardized, sometimes requires approval from regulators.

2. Access to information:

– private equity – investor can request access to all information;

– publicly traded equity – investor can use only publicly available information.

3. Post-investment activity:

– private equity – investors typically remain involved in the company after the transaction;

– publicly traded equity – investors have limited access to management.

In addition, it is worth to indicate that returns on private equity investments have usually low correlation with returns on public company investments

Distressed securities

They are securities (usually stocks) of companies that are in the financial distress or near bankruptcy. For some investors they are attractive investments because they create opportunity for skilled managers and investors. The main characteristics of this class of investments are:

– there is need to use high skills and understand the business of particular company;

– there is need to consider going concern and liquidation of the respective company.

Hedge funds

Hedge funds is the segment of alternative investments which has been developing very dynamically in last years. Originally, hedge fund was private partnership that took different equity positions in the market to reduce net market exposure at the acceptance of lower rate of return. Today hedge funds are loosely regulated investment vehicles, which use very aggressively leverage.

Managed futures

This is general name for private pooled investment vehicles that can invest mostly in derivative markets and use financial leverage in the investments. To some extent managed futures may look similar to hedge funds, but the main difference lies in the fact that managed futures invest in derivative instruments where underlying instruments are usually indices of basket of assets. The performance of investment in managed futures depends very much on the skills of portfolio managers. Basically two main types of strategies are used by portfolio managers of managed futures:

– systematic trading strategies – here trading model based on past prices is used;

– discretionary trading strategies – here fundamental data and trader expectations are used.

To summarize, we systematize the types of alternative investments presented above by assigning them into different classes mentioned in chapter 2:

Investment in real assets: real estate, commodities;

Investment in debt or equity instruments: private equity, distressed securities, investments in debt and equity instruments related to real estate market;

Investment in index, which corresponds to portfolio of assets: hedge funds;

Investment in derivative instruments, where underlying index refers to single asset or portfolio of assets: managed futures, property derivatives.

From economic point of view, the main usefulness of alternative assets is for risk management. In addition, for some classes of assets, especially real estate and private equity, it helps to provide funds to develop respective sector.

In this paper we gave the description of the most important classes of alternative investments. However, the developments in this area are very dynamic. To conclude, we would like to mention three other classes of investments. They are very special and exotic ones, but they are already getting some interest.

1. Art investing

Art is by no means any new type of investment. The most important features are:

– pricing is not driven by supply and demand process but by the willingness of people to pay given price for piece of art;

– basically there is very limited supply of ancient art, which supports the previous statement;

– fair valuation of pieces of modern art can be done after many years, which also supports the previous statement;

– there is lack of reliable data on art prices, the only well known market index is Mei Moses Fine Art Index.

2. Wine investing

This type of investment is very exotic and it does not contribute very much to investment portfolios due to rather limited size of the investment. It requires (similarly as art investing) very special expertise. Some guidelines are provided by looking at wine investment indices, like Decanter Fine Wine Tracker. One of the main advantages of this investment is good diversification property.

3. Weather investing

This type of investment contains investment in weather derivatives. These are derivatives that have become very popular in last decade. These instruments were designed to manage weather risk, but now they are also used for investment purposes. The underlying indices for these derivatives are: temperature index, rainfall index, snowfall index and wind index. These investments have good diversification properties and require considerable expertise in meteorology.

References

[1] Aronson M.J.P., *Handbook of Alternative Assets*, Wiley, New York 2006.

[2] Jobman D., *The Handbook of Alternative Investments*, Wiley, New York 2002.

[3] Yau J.K., Schneeweis T., Robinson T.R., Weiss L.R., *Alternative Investments Portfolio Management*, [w:] *Managing Investment Portfolio: a Dynamic Process*, Wiley, New York 2007.

NIEKTÓRE TENDENCJE W ZAKRESIE ALTERNATYWNYCH INWESTYCJI

Streszczenie

Artykuł dotyczy problematyki tzw. alternatywnych inwestycji finansowych, czyli inwestycji innych niż klasyczne inwestycje w akcje i instrumenty dłużne. Oprócz wskazania ogólnych tendencji, jeśli chodzi o inwestycje finansowe, artykuł przedstawia szczegółowo różne klasy alternatywnych inwestycji (najważniejsze to nieruchomości) oraz wskazuje na ich cechy charakterystyczne.