Return-Risk Tandem, Decisive Factor in Taking the Financial Fecision

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Abstract

The meaning of any economic activity is to obtain the maximum possible value, under any conditions of economic environment. The development of the economic act in the presence of risks of different nature, leads, depending on how they are managed, to different results between companies from the same sector of activity, with comparable endowments. The aim of the paper is to present some methodological aspects of business selection according to the proportionality of risk profitability, in the conditions of a rational behavior of investors. The market is generally showing a tendency to equalize the marginal profitability, but in a relatively long time, due to a variety of factors such as management experience, time to access and process information, and its correct interpretation, ability to anticipate and control risks.

Key words: financial return, financial risk, capital investment, final capital, systematic risk
J.E.L. classification: F30, G01

1. Introduction

Reaching the purpose of every economic activity suggests that the maximizing the value can be achieved through profitable investments which are implicitly associated with a certain level of risk.

Chart no.1. Return-risk ratio
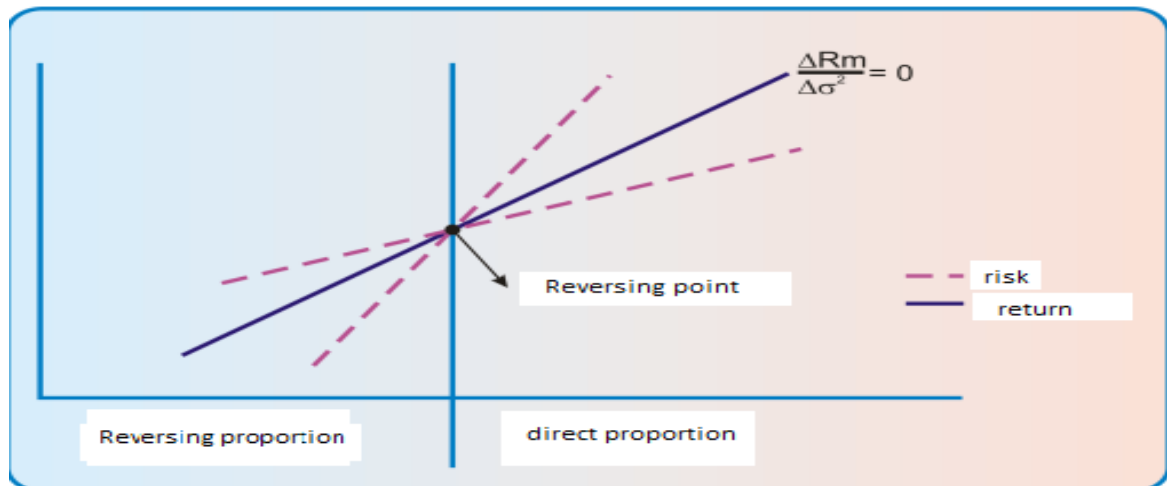
Source: (Vlad, 2015)

Given that the two terms of the relationship cannot be separated, a first decision concerns both the economic environment and the financial realities as selecting investments:
• Investments with a direct proportionality between investment returns and risk;
• Investments with a reverse proportionality between investment returns and risk.

Right from the start, a rational behaviour requires removing investments with a reverse proportionality and placing ourselves depending on particular judgments in the direct proportionality area, bounded by the reversal point of the proportionality and by the level when the marginal return is zero.

2. Theoretical background. Financial return

Determining the return on the financial market must be initiated starting from the practical trend of equalizing the marginal returns through arbitrage operations. Equalization itself cannot exist because the dynamics of economic and financial activities constantly change the balance between the segments of the financial market. The shape on which the return can be obtained on the financial market is determined by manner on which the capital is invested: participation in the share capital of a company; credit and foreign exchange tools (Stancu, 2010).

a) *Participation in the share capital of a company* is made by purchasing shares from the issuing company, thus the return is ensured by two components:
• Remuneration from the issuer in the form of dividends (1);
• Increasing the market value, which bring gains in the form of capital (2).

$$Rr = \left(\underbrace{\frac{Dividend}{Pa}}_{1} + \underbrace{\frac{Pv - Pa}{Pa}}_{2} \right) \times 100$$

where: R - the rate of return; Pa – the purchase price; Pv - the selling price

b) *Investment in credit instruments* (bank loans,bonds,etc.) bring remuneration as interest. This is a smaller profit but sure profit. Compared with the shares this investment in credit instruments can be considered an investment that "sacrifices" the return through which it is paid the refusal to assume the risk. In the case of the foreign investment the return can be ensured by the favourable exchange rate differences.

c) *Foreign pure currency exchange* capitalizes the direct or indirect rate differences between two currencies (cross) by interposing others. Currency exchange related to import-export operations can ensure both profitability in exchanging operations and an indirect profitability of the concerned economic transaction. The return analysis takes into account the comparable market interest rate and its expression in real terms.

Chart no. 2. Changes in the interest rate and the return influence over the investment
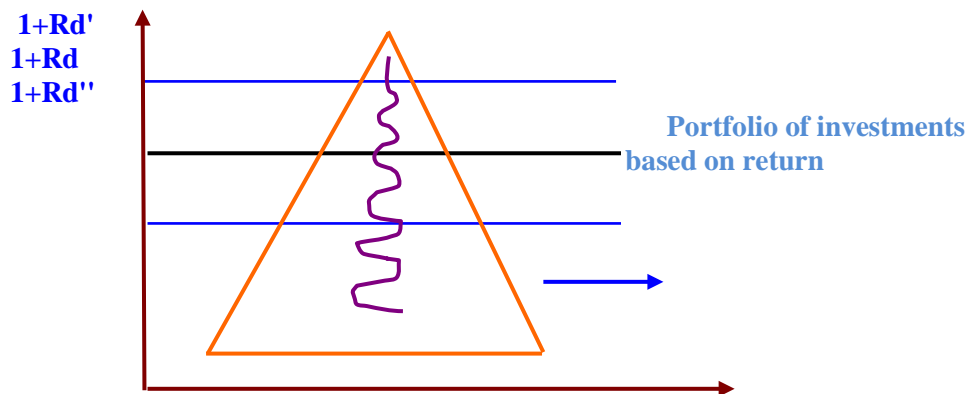
Source: (Vlad, 2015)

The interest rate market, as an expression of the balance between global supply and demand of capital is the main landmark for any investment. Changes in interest rates may bring an investment in the profitable area or can make it unprofitable compared with the market. In the economy, there are very few investment areas with high returns and very limited in time as they attract the interest of market players, leading to rapid growth of the offer. Thus regarding the average, not all investments can be above this, either because the opportunities cannot be identified or because a sacrifice of return is preferred to reduce the risks. The normal trend of achieving the average determines its growth, there always being a distribution above and below it.

The market interest rates (1 + Rd) achieves a first delimitation between the profitable and unprofitable investments. Increasing interest (1 + Rd') lowers profitability for some of the investments and makes some of them unprofitable. Conversely, interest rate cuts (1 + Rd ") lead to increased profitability of some investments or to profitableness of others which until that time were not attractive (Vlad, 2015). To relate to the market interest rates draws a relative image of the return. If one of its values is below the market rate does not necessarily mean it is an unprofitable investment. In this case there is an opportunity cost between the market return and investment. Comparing the interest rate with the return must be made for the entire ownership duration of the financial asset. In fact, capital investments are triggered by the expected return, and not by the current return:

$$K_0(1+Rr)^n = K_n$$

Where : K_n - capital investment; n - retention period;
Rr- rate of return; K_n- final capital.

Expressing the return in real terms is strictly necessary to highlight the actual increase in capital investment. Basically, the nominal return (Rn) shall be split in a part covering inflation (i), thus preserving the value and another part that representing the added value [13]. Actual return (Rr) is determined according to Fisher assumption:

$$1+Rn = (1+Rr)(1+i) \Rightarrow Rr = \frac{1+Rn}{1+i} - 1$$

Basically, the assumption is based on the observation that an increased inflation leads to greater interest rate and vice versa, in a direct proportionality. While, the actual rate has a slow evolution, as a use sudden change would unbalance the ratio of demand and supply of capital, the practice of the developed financial markets shows that the hypothesis is about accurate. Hyperinflation or macroeconomic development strategies can impose negative real interest rates. In the first case there is achieved a degradation of capital, and in the second, a return boost is achieved by the influx of cheap capital in the economy. From the position holder equity, lower investments diminish return for the moment, but the subsequent growth of the economy leads to high return. Empirical tests show that investors are not interested in absolute return but in marginal return (ΔRm) corresponding to the last allocated unit of capital which may favourably or unfavourably change the average return.

In general, the marginal return is on a decreasing trend (Stancu, 2010).

3. Financial risk

Risk analysis is done by taking account two aspects (Vlad, 2015):
• The acquisition of a financial instrument is based on expectations of future return;
• Expectations are always projected in an uncertain future.

The impossibility to fully quantify the risk determines deviations from the expressed expectations, meaning the decrease of the return or the capital losses. Therefore, the impact of insecurity will be pervasive throughout expressing and conducting the financial decision. The diversity of the risks faced by an investor in the financial market can at a first stage be classified as macro and microeconomic risks.

Macroeconomic (systematic) risk manifests in the entire market level and is given by the macroeconomic indicators, gross domestic product, inflation, unemployment, exchange rates, etc., as well as by a number of social, political, military or environmental phenomena. In the globalized financial market the negative effects propagate like a domino effect on other markets or even at an international scale.

The publication of the US economy macroeconomic indicators takes effect in all the emerging markets. Thus, changes in the pace of the rate US economic growth causes the same oscillation on the stock market in Japan whose economy is largely dependent on its USA exports. The decrease of the orders on the US real estate market, during the crisis, has affected the share price of the building field in France, which was the main supplier of materials for this market.

Macroeconomic factors may have a "swing" effect, by promoting an economic area over another economic area.

Following the evolution of the oil price on the stock market it can be noticed that during its growth, it stimulates the share price of the oil processing companies at the expense of the car industry and vice versa.

From the investor's point of view the market risk is relatively un-diversifiable. This statement takes into account the level of dependence of the issuer with his national economic environment. At the same time, not all activity sectors are affected equally. Financial globalization makes possible the risk diversification at national level through investments on various markets. This type of risk is considerable even for developed markets; in the US it is estimated at 30% and in France and Great Britain at 33%, namely at 41%. For the markets of the developing economies, the systematic risk is often the dominant one. The market risk is quantifiable through the market evolution indicators, their monitoring representing a basic rule of the financial discipline.

The main macroeconomic risks are (Frâncu, 2010):

- *Interest rate risk.* Changes in interest rates have a direct impact regardless of the position, namely creditor or debtor. Interest rate risk is closely correlated with the exchange rate risk. The monetary authorities' strategy of increasing and decreasing the interest rate has a directly proportional effect on the exchange rate by making the currency to be more or less attractive. In international transactions this effect leads to a compound risk, currency risk plus interest risk.

- *Currency risk.* Renouncing to the fixed rates has led to a continuous fluctuation of exchange rates with much higher amplitude for the representative currencies of the developing economies. Depending on the situation at a certain point in time, the national currency control authority may enforce the appreciation or depreciation of the national currency compared to other currencies. Such a decision is primarily related to foreign trade; exports are stimulated through the increase of the value of the national currency, while imports are favoured by currency depreciation.

- These two types of risk are the most important on the global financial market.

- *Liquidity risk* occurs when the market is not able to trade in real time any volume of securities. The negative effect on return is given the loss of optimal moment for release of capital to be invested in another business considered to be more profitable.

- *Coverage risk* occurs when there cannot be found a satisfactory market, to provide protection for the assumed risk through the acquisition of securities. This risk is faced by the investor who chooses the wrong financial instruments for protection.

- *Concentration risk* occurs when only a specific market segment or a single financial instrument is taken into account.

- *Operational risk* is triggered by the malfunction of the ways of decision transmission, by human error, fraudulent individual behaviour, etc. This results in an ineffective control, information leak or distorted information with a negative impact on the decision substantiation.

- *Counterparty risk* implies the fact that one party does not pay at maturity the obligations arising from the transaction. In such situation, the market regulations require taking responsibility in order to pay the commitments, some costs being paid by the partner who has not complied with his obligations.

- *Legislative risk* is characteristic to the developing countries and occurs due to frequent and unpredictable legislative changes, to the manner how the legal institutions function, especially in case of dispute. It has a negative effect on capital inflows, particularly on direct investments.

- *Country risk* targets the possible negative potential induced by decisions taken by national or supranational authorities. Authority decisions refer to socio-economic development strategy, to the control of interest rates and exchange rate, legislation, etc. It is also necessary to be taken into account the stability of domestic transactions, the effective functioning of institutions, etc.

Microeconomic risk is specific for the issuer of securities and for its industry:

- for a security, the specific risk is determined by: return variability, chosen development strategy, credibility among investors, etc .;

- for an area of activity, risk factors include: the position it holds on the domestic and foreign markets, state involvement for the stimulation or inhibition of the activity, demand level and its foreseeable development etc.

This type of risk is diversifiable by limiting exposure to a single economic area or issuer.

Systemic risk

As defined by the European Central Bank (2013), the systemic risk "is the inability of an institution to meet its obligations on time, which determines the inability other institutions to fulfil their obligations on their maturity date. Such a situation can cause contagious effects (e.g. major liquidity or credit problems), jeopardizing the stability of the financial system or confidence in them. The inability to fulfil their obligations may be due to financial or functional problems."

During the financial crisis and post financial crisis period in the Eurozone have been reported as systemic risks, which have not exceed the average level:
- ✓ The interplay between the vulnerabilities of public finances and the financial sector;
- ✓ Funding risk and volatility of the banks' funding costs risk;
- ✓ Risk of increase of the long term global interest rates;
- ✓ Tensions related to the prices increase of the assets in emerging countries and the risks associated with re-emerging of international imbalances.

The most recently reported systemic risk on the financial market is the risk of the intermediaries, of the so-called "shadow area". Their activity has grown rapidly in the past five years and the main vulnerability that can generate is amplifying the liquidity deficit in times of financial stress.

4. Conclusions

The analysis of profitability and risk assumes that, on a rational basis, any investor seeks to identify those investments with a direct proportionality between the expected return and the attached risk. The possible placements offered by the market are different, but can be grouped into categories: share capital, bank deposits, currency market. The option for one category or another is based on a comparative analysis of the expected return and identified risks faced.

Practice has shown that, in most cases, the attitude toward risk is decisive in the selection of placement opportunities. The multitude of risks that exist can also be classified as macro and micro-economic. If the first category is independent of the investor's actions, and the investor is left with only the option of circumventing them, the micro-level ones can be managed effectively by the management team or, at least, diminished in their appearance.

A type of risk, arising during the financial crisis, is the systematic risk which has the effect of the chain collapse of institutions with business relationships as a result of the default of one of them.

The pervasive presence of risks in all areas of economic – social life therefore requires that they be covered at any time, and economic theory is obliged to deepen research in this area.

5. References

- Stancu, I., 2010. *Finance*, Fourth Edition. Bucharest: Economic Publishing House;
- Vlad, C., 2015. *Finances in the Globalization Era*. Germany: Lambert Academic Publishing;
- Frâncu, M., 2010. *Capital Market.* Bucharest: Economic Publishing House;
- European Central Bank, 2013. *Annual Report;*
- European Central Bank, 2017. *Economic and Monetary Evolution;*
- European Central Bank, 2015. *Financial Stability Review.*