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THE IMPACT OF RISK ON

THE STOCK EXCHANGE BEHAVIOUR

TITUS SUCIU, PATRIZIA GAZZOLA

Transilvania University of Brasov, Insubria University of Varese,

titus.suciu@unitbv.ro, patrizia.gazzola@uninsubria.it

Abstract Risk is a permanent feature of the capital market, as it plays the main part on the stock exchange.

The work shows us the impact of risk on the behaviour of the stock exchange traders: ignoring correlations, prejudice of familiarity, national bias, local bias, employer's prejudice and the emotional bias.

Investors are faced with the difficulty of assessing the risk of owning an asset for their income. They would rather take into account the inherent risk of assets, than to appreciate the change generated regarding the global risk of their securities. Investing will actually allow to adapt the income performances when they are on the rise, when the others fall, and the other way round. Revenue, taken as a whole, has to be optimal and to best reflect the preference of those who economise relatively to the risk. Even for someone who is very prudent, risky actions may be needed to get the best performance possible, taking into account the low risk level.

Prejudice of familiarity appears when an individual prefers an option to another one just on grounds of familiarity. Advertising effort has a stronger impact on the number of individual shareholders. Such a result confirms the ideea that private persons, more than professionnals, trust nonfinancial criteria such as familiarity to choose investments.

Investors exaggerate the weight of domestic shares in their income. Academic studies have shown that national titles are perceived by private persons as less risky than the foreign ones. The national prejudice generates an overexposure of securities to national risk, which could be reduced by geographic variation. (the USA, Europe, Japan, emerging markets).

The local prejudice determines the investors to give preeminence to shares of companies in their region.

The employer's prejudice is the most dangerous consequence of the attraction for financial investments. It is characterized by an overconcentration of income of the investors into the titles of the hiring company. Employees build their trust in the capital of their company after the share has progressed. A strong ratio of investments by the employees in the company bonds doesn't show sign of a strong future progress of shares.

The contrary relationship between the perceived risk and the perceived benefit of an activity is actually connected to the soundness of the negative or positive feeling associated to the respective activity. Individuals found their judgment not only on what they think, but also on what they feel. Il they like an activity, they are tempted to consider risks as minor, and gains as important. If they have a negative feeling, they tend to judge the opposite.

Although risk means that many things only may happen than they will actually do, a definition comprising the idea of volatility- this statement does not specify a time unit. Once the temporal dimension is introduced, the link between risk and volatility tends to weaken.

The risk is within us. If we over estimate our ability to really understand an investment or to come out clean after a dramatic price period, it doesn't matter what our portfolio contains or what

happens on the market. In the end, the financial risk does not lie in what types of investments have we done, but in what type of investor we are.

All these elements pertain to behavior finance and they show us that the investor is not reasonable most of the times when he/she makes a decision on the capital market and in relation to the risks undertaken on the stock exchange.

Keywords*: risk, behaviour, finance, investor, psychology*

Jel Classification: *C92, D53, G02*

1. INTRODUCTION

Along time, risk was one of the most fascinating topics chosen for study. Risk is a permanent feature of the capital market, as it plays the main part on the stock exchange. In order to define risk several notions were formulated: sacrificing an immediate advantage or the lack of immediate consumption, in exchange of future advantages; loss of a clear, distinct advantage from the purchase and use of a real good or by taking a service for a future and uncertain advantage from investing in securities; lack of certainty over the value of a financial good to be recorded at a future date. The risk of an investment triggers possible variations in the expected average return as a result of the unexpected fluctuation of the economic and financial phenomena which determine it. (Stancu, 1997

In finance, the risk notion used is the variance, i.e. all the favourable and unfavourable deviations compared to the average, with frequencies distributed according to the common norm: the average has the highest frequency, while the favourable and the unfavourable deviations are symmetrical. (Stancu, 2012)

Mândru considers that ,, risk and uncertainty are permanent features of the environment in which companies function; they are to be found in varying proportions, with the peculiarity that uncertainty is always present.’’ (Mândru, 2011)

2.THE WAY RISK IMPACTS ON THE BEHAVIOUR ON THE STOCK EXCHANGE

2.1. Ignoring correlations. Why do you keep refusing to own foreign shares?

Investors are faced with the difficulty of assessing the risk of owning an asset for their income. They would rather take into account the inherent risk of assets, than to appreciate the change generated regarding the global risk of their securities. Investing will actually allow to adapt the income performances when they are on the rise, when the others fall, and the other way round.

Nosfinger made an experiment on the perception of risk among the finance students and of the members of the investments club. They put themselves in the shoes of an investor with a wide portfolio, which included american and international assets. They were asked which placements of a given list would increase the risk of the income and which of them would reduce it.

The list was made of American Treasury bills, bonds of well-listed companies, high-yield bonds, shares of emerging countries, European and Asian shares, from a fund varied in small increase values, from shares of smaller companies and from real estate. The intrinsec risk was well set: treasury bills and bonds being the safest and the emerging countries shares and increase values being the most risky. When taking into account the correlation of performance to revenue, results changed considerably.

In fact, small caps, the effect of which was considered neutre by the people inquired, increase the risk of the revenue, while emerging countries shares, considered as very concerning, significantly decrease them. In the first case, the own risk of the placement is doubled by the added risk, while in the latter, the inherent risk is offset by a weak correlation of the trends of bonds in the USA and in the emerging countries. Emerging countries shares, even if very volatile, allow to decrease the global risk of values only because their trends do not follow closely that of the American market. (Nosfinger,2001)

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Revenue, taken as a whole, has to be optimal and to best reflect the preference of those who economise relatively to the risk. Even for someone who is very prudent, risky actions may be needed to get the best performance possible, taking into account the low risk level.

2.2. The familiarity bias

It appears when an individual prefers an option to another one just on grounds of familiarity. In order to highlight the bond between familiarity and investment, Grullon, Kanatas and Weston quantified the relationship between advertising expenditure of listed companies and the number of individual shareholders. Between the companies which have a poorer advertising and the more generous ones, the number of individual shareholders is multiplied by a factor of 4 to 40, depending on the capitalizing levels. The relationship is available in statistical tests. A regression that controls a series of variables (size of the company, profitability, volatility, price and liquiditiy) shows that an increase by 10% of advertising expenses will increase by an average of 2.7% the number of shareholders of the company. If a company passed from the second to the fourth fifth of the sum for advertising, the number of shareholders would increase by 74% (Grullon, Kanatas&Weston ,2004)

Advertising effort has a stronger impact on the number of individual shareholders. Such a result confirms the ideea that private persons, more than professionnals, trust nonfinancial criteria such as familiarity to choose investments.

2.3. National prejudice. Why are 90% of your revenues made up of domestic shares?

Investors exaggerate the weight of domestic shares in their income. Opposite to the financial theory which recommends distributing revenues according to relative capitalizations of various markets, investors concentrate most of their shares in the domestic section. Academic studies have shown that national titles are perceived by private persons as less risky than the foreign ones.

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Kilka and Weber studied among the students the predictions of German and American investors on future trends of German and American shares. Each individual had to mention the following aspects for three binational pairs of shares comparable in size and industrial sector:

- level of competence for evaluating the course on three months on a scale from 1 to 7

- probability that the respective courses show progressions in predefined intervals (lower than 10%, between 10 and 5 %, between 5% and 0%... higher than 10%)

- confidence levels of 10%, 50% and 90%.

They discovered that students consider to be more competent in predicting the trend of domestic shares than that of the foreign ones, this being translated into a more optimistic estimate of the distribution of yields and less dispersed in the case of domestic titles. In the opinion of the German students, German titles ensure a higher yield and a lower risk than the American ones, while for the Americans, the percetion is quite the opposite. In fact, the two groups make predictions which are totally contrary to the lessons of financial theory which reads that risk and yield go hand in hand. The more titles on a certain market have more volatile performances, the higher the average yield generated. (Kilka&Weber, 2000)

The national prejudice generates an overexposure of securities to national risk, which could be reduced by geographic variation. (the USA, Europe, Japan, emerging markets).

2.4. Local prejudice. Why have you bought shares of the most important company in your region?

The local prejudice determines the investors to give preeminence to shares of companies in their region.

Huberman analized the shares of seven baby bells, i.e. regional phone companies resulting from the 1984 dismantling of the company ATT. He discovered that 20 years later, investors continued

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to have bonds with the local baby bell rather than with other regional companies. Thus, the fraction of the local baby bell capital owned by the inhabitants of a state is 2.76 times higher than the capital share owned in average by the same inhabitants with the other regional companies.(Huberman, 2001)

Thus, in complete opposition to sparing habits, financial theory ensures us that the persons who should be the least interested in your region are the very people who live there.

2.5. The employer's prejudice. Why do you own shares of the company you work at?

The employer's prejudice is the most dangerous consequence of the attraction for financial investments. It is characterized by an overconcentration of income of the investors into the titles of the hiring company. Based on an enquiry on 246 of the biggest American companies, Schultz discovered that 42% of the employees' pension funds used to be invested in the respective companies' titles. This overconcentration is the riskier as the employees already ensure the entire human capital (labor capacity) already invested in the hiring company.

This opinion is exposed by Benartzi, who interpreted the results of an inquiry conducted by the website morningstar.com based on 1095 respondents- internet surfers- who answered to a questionnaire on the performance of their company. At the question: ,,do you think that the shares of the company which hired you is likely to lose 50% of their value more than the market in the next 5 years?'' ; the answers have shown that only 16.4% of the respondents consider that the bonds of the company are riskier than the American market. Among the internet surfers without academic background only 6.5% have this perception on risk. (Benartzi, 2001)

Employees build their trust in the capital of their company after the share has progressed. A strong ratio of investments by the employees in the company bonds doesn't show sign of a strong future progress of shares.

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2.6. The emotional reasoning

Researchers have noticed that risk analysis associated to an activity and of the benefits it gives are negatively related. For many phenomena, the more important the benefit, the lower the risks. And the opposite. Alcohol, cigarettes or genetically modified organisms are perceived as very risky and not quite profitable, while vaccins, antibiotics and X-rays are considered to be very useful and not really dangerous. This negative relationship is remarkable as it appears precisely when the objective link between risks and benefits of activities is lacking and because human activities seem to answer to a rather contrary law.

The contrary relationship between the perceived risk and the perceived benefit of an activity is actually connected to the soundness of the negative or positive feeling associated to the respective activity. Individuals found their judgment not only on what they think, but also on what they feel. Il they like an activity, they are tempted to consider risks as minor, and gains as important. If they have a negative feeling, they tend to judge the opposite. For the recently listed companies, the image of the company and its emotional evaluation are important criteria on which investors count when they make decisions .(Mangot, 2009)

Although risk means that many things only may happen than they will actually do, a definition comprising the idea of volatility- this statement does not specify a time unit. Once the temporal dimension is introduced, the link between risk and volatility tends to weaken. Time has an impact on risk in many ways, not only in its relation to volatility…. If you do not intend to sell a package of shares, you don't care about its price. For the real long-time investors, volatility means an opportunity rather than a risk, at least to the extent volatile bonds tend to have a higher profitability than other stabler assets.(Berstein, 2014).

Risk sensitivity represent a skewed weighting of influence of unconditioned stimuli that bias an organisms preference for a risky stimulus. With binary-symmetric outcomes if an organism has a non-linear accelerating convex value function then that organism will place more value on the

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higher of the two rewards compared to the lower reward and therefore will prefer higher risk situations as a direct consequence (and vice versa for an organism with a non-linear decelerating concave function). Neither of these normative or descriptive approaches requires risk information per se at the time of uncertainty (before outcome) to be processed by a decision maker.(O'Neill, Schultz, 2015, 76)

Investment income can increase after a firm holds equity stakes in financial institutions, but this is only the case for non-state-controlled firms, and overall operating income decreases, which cannot be offset by the increase in investment income. The return on assets declines as a result. Furthermore, after investing in financial institutions the cost of debt rises, cash-holding falls, and stock returns do not improve. Investing in financial institutions does not result in improvements in operating performance, nor does it reduce transaction costs. Given that these firms are larger, more profitable, and possess abundant cash reserves before becoming involved in the financial industry, their overall performance does in fact deteriorate. (Xu, Yin, 2017, 124)

Most of the anticipated relationship between financial risk tolerance and each of the demographic or socio-economic variables of individual investors from the literature were found to be relevant. It is generally thought that financial risk tolerance of individual investors decreases with their age. The study fails to support this view, or even provide evidence to the contrary. The common belief is that single people are more risk tolerant than married ones. The study agrees that higher levels of formal education increases one's ability to evaluate risk and therefore gives a higher financial risk tolerance. The present as well as many other studies found a positive relationship between income of individual investors and their financial risk tolerance. However, this study indicates significant low negative correlation between the number of dependants and financial risk tolerance. The analysis of different demographic factors of individual investors with their financial risk tolerance indicates that the demographic features of individual investors could be used to distinguish between levels of financial risk tolerance, and an association of these variables could be developed to predict a person's risk-tolerance. (Sulaiman, 2012, 114)

3. CONCLUSIONS

The financial field offers a wide range of products to whoever wants to increase his or her revenues, by increasing the likelihood to find investments according to one's needs, at the same time making one's choices ever more complex. **Decisions are taken intuitively, based on friends'advice, on financial analysts or based on personal experience and on learning. Feelings may lead to inconsistent decisions or lead to reasonable choice.**

Elementary statistic notion should be taken into consideration in order to come back to the average value. When a person underperforms, it is quite likely to do very well the next time. The same goes the opposite- the one who did well will most probably underperform next time.

The performances on the market are crucial for a sale than the absolute ones. Although reluctance towards losses is to a certain extent generalized with investors, the benchmark used will vary from one investor to the other. **The high number of milestones (the buying rate, the highest value, the dividend yield, economic profitability, PER, P/BV, EPS) plead for a lack of stability of decision-making cognitive processes.** It makes us wonder whether the respective lack of stability is older or just an ad-hoc one. Does the investor from his investments?

The risk is within us. If we over estimate our ability to really understand an investment or to come out clean after a dramatic price period, it doesn't matter what our portfolio contains or what happens on the market. In the end, the financial risk does not lie in what types of investments have we done, but in what type of investor we are. For this, there are five types of investor profiles: very conservative, conservative or moderate, balanced, growth oriented and dynamic or aggressive. Practically, the last two are suitable for a stock market broker.

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