SOCIAL REPRESENTATIONS OF THE STOCK MARKET

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Summer school 2011

“ MASS PSYCHOLOGY OF THE STOCK MARKET: HETEROGENEOUS AGENTS, MEDIA AND INVESTORS”

- The project of this thesis is part of a larger transnational and interdisciplinary research program focused on “ Mass Psychology of the Stock Market: heterogeneous agents, media and investors” presented at the ERC council on 2009 by de Rosa and it is a continuation and further extension of the pilot study on the psychology of the stock market in media and in different types of investors (de Rosa, Gioiosa, Errieto, 2005; de Rosa, Gioiosa, 2008).

FOCUS OF THIS RESEARCH PROJECT

- The hypothesis of this research project is that different financial behavior is strongly correlated with a set of personal psychological dimensions that include specific metaphors and social representations of the stock market.
- The research have its main headquarters in Italy, site of the Principal Investigators' institution but it has also been conducted in France, UK and China.

3 LINES OF INTERRELATED RESEARCH

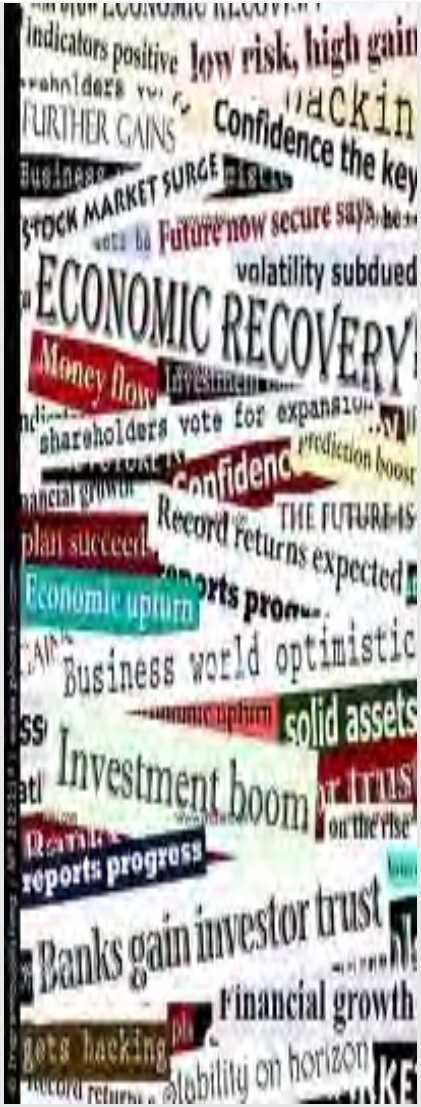
The study has been organized in different lines of inter-related research and several main steps, in particular:

- **Cultural Context Background Analysis:** Media analysis for Expert and Lay Targets
- **Media Analysis:** analysis of Generalist and Specialized Print and Digital Media by Alceste Program
- **Multi-method studies (Qualitative approaches and quantitative approaches) :** Interviews to Financial Advisors, Investors through Financial Advisors and On-line Investors.

-CULTURAL CONTEXT BACKGROUND ANALYSIS: HYPOTHESIS AND MEDIA

This study is focus on social discourse elaborated by media concerning economy and finance in the period between September 2008 and April 2010, which is strongly determined by the financial crisis that sets the "contextual scenario" of the social representations.

- The research has been conducted using texts and interviews published in general and specialized, in print and digital media, with economic and finance specialists. We have analyzed Italian, Franch, English, American and Chinese print media in countries were different languages are spoken and different media systems operate.



CULTURAL CONTEXT BACKGROUND ANALYSIS: OPINION LEADERS AND LAYMEN

- **academic experts** (Serge Latouche, Alberto Alesina, Francesco Giavazzi, Nadia Urbinati, Luigi Spaventa, Loriana Pellizzon, Roberto Marchesi, Mazzotti,D. Gaggi,M., Roberto Marchesi Marcello de Cecco, Marco Onaldo, James heckman, Zhiwu Chen, Tullio Japelli, George Akerlof, Ronald Dore Jacques Attali)
- **banking experts** (Ben Bernanke, Jean-Claude Trichet, Ignazio Visco, Charles Morris, Roberto Mazzotta, Ennio Doris, Stephen Green, Neil Woodford, Gianni Bottalico,Oscar Farinetti, GiuliettoChiesa)
- **political leaders** (Giulio Tremonti, Daniele Molgora, Dominique de Villepin, Nicolas Sarkozy, Massimo D'Alema, Dario Franceschini, Silvio Berlusconi, Barak Obama, Susanna Cammuso, Gordon Brown, Wen Jiabao, Muhammad Yunus)
- **financial/economic journalists** (Gad Lerner, Arianna Ferrari, Luca Santini, Marco di Paolo, Giuseppe Gaffo, Fausto Tenini)
- **laymen** (few people participants in various on-line forum)

CULTURAL CONTEXT BACKGROUND ANALYSIS: RESULTS

One of the first evident results is the redundancy of rhetorical figures of speech in both in generalist and specialized sources, which concerns six main thematic areas:

Below are some statements made by opinion leaders, chosen from different socio-professional backgrounds, that reinforces the representation of finance as

- **"under accusation"**: "Finance is under siege, accused not only of having provoked the most serious economic crisis since the 1930s, but also having pushed the price of primary materials sky high" (Alesina, A. & Giavazzi, F. 2008 p.57)9Alberto Alesina (Professor of Political Economy, Harvard University)
- **Genesis and development of "bad finance"** and its global effect: "In the United States and in Europe, the crisis is now hitting the real economy" Loriana Pellizzon (Economist, University of Cà Foscari);
- **Contribution of science** (financial mathematics) **and virtualization of economics into finance** (volatility and risk): "Creating effects of wealth and artificial demand, the new techno-finance fundamentally contributed to financing the almost instantaneous "miracle" of globalization" Giulio Tremonti (Italian Minister of Economy and Finance);
- **Deregulation and market self-regulation:** "(...) The need returns for politics, State intervention in the economy, supranational rules and regulations capable of influencing a global market." Massimo D'Alema (Former Italian Prime Minister);
- **Dissociation of science from ethics**: "(…)the open structure of financial markets, the failure of controls and new finance techniques together provided the way out of this fixed plan. The break down of the old equilibrium between risk and responsibility: the opening up of a great asymmetry between risk origin and responsibility for risk" (Tremonti,G. 2008 p.14);
- **To be done: reaction to the crisis and ethical choice**: "Millions of Americans who have worked hard and behaved responsibly have seen their life dreams eroded by the irresponsibility of others and by the failure of their government to provide adequate oversight(...) " Barak Obama (U.S. President);

CULTURAL CONTEXT BACKGROUND ANALYSIS: CONCLUDING REMARKS

- The key points which organizes the whole discourse as transversal dimension is the opposition between economics and finance, confirming the hypothesis that one of the rhetorical devices used as an explanation for the financial crisis is based on the split between the good "real" economy and bad "virtual" finance. The former being anchored in the productivity of real people and their work, the latter in insubstantial financial products produced by speculators so complicated that ordinary people as well as so-called experts do not understand them.

Economic and financial specialists, often questioning the identity of their disciplines, in most of the cases deal with the complex relationship between economics, finance, and politics, simply rediscovering the "common sense truth": to come back to the measure (to do not spend more money than we gain!), the trust, the confidence, the social equity and more justice, the "need to return to real reality rather than tying ourselves to virtual reality" . In a word: the future seems a return to the past

-MEDIA ANALYSIS

Analysis has been conducted using texts of online newspapers articles:

- - generalist La Repubblica (97 articles)
- - specialized Il Sole 24 Ore (248 articles)

in the economical and financial field published in the home page of the newspapers website from September 2008 to April 2010.

- The online grid used as research tool for this research line is based on the variables of the

questionnaire used in the following

research line.

The online grid is available at this address:

http://www.kwiksurveys.com/online-survey.php?surveyID=OBJEH_a598d2c7&UID=2709328686

MEDIA ANALYSIS: VARIABLES

- - -Newspaper , -Date of the article, -Author ,-Author qualification, -Political Orientation, -Title of the article - Editorial placement -Thematic Area, -Link of the article, -Data of retrieval of the article, -Frequency of the word stock market,
- -Metaphors referred to the stock market (running race, machine, game, gambling, sport, war, living being, ocean, bazaar),
- -Conceptual links referred to stock market,
- -Investments channels in Stock Market (through promoters, through post office, autonomously on-line, through traditional bank),
- -Temporal Dimension of the Financial Crisis and polarity (positive or negative)

MEDIA ANALYSIS: VARIABLES

- Social Representations of Finance:

UNDER ACCUSATION/ ACQUIT, DEFENCE OF THE DEFENDANT/ METAPHORS/ AS VIRTUALISATION OF ECONOMY/ DEREGULATED/ DISSOCIATED FROM ETHICS/ ACTION OF REACTION TO THE CRISIS /Others

- -Social Representations of Economics:

UNDER ACCUSATION/ ACQUIT, DEFENCE OF THE DEFENDANT/ METAPHORS/ AS VIRTUALISATION OF ECONOMY/ DEREGULATED/ DISSOCIATED FROM ETHICS/ ACTION OF REACTION TO THE CRISIS /Others

MEDIA ANALYSIS: BY ALCESTE PROGRAM, RESULTS

- Contrary to the results of the previous study based on qualitative content analysis of books and magazines, in this study on statistical content analysis an interrelated representation of economy and finance emerged in both classes.
- In the first class, good economy is associated to recovery; economic recovery is slowed down by bad finance. Both aspects are interrelated:
- "our stock market is very exposed to the financial sector and in this moment at a global level the financial sector and banks in particular, are more vulnerable to the crisis" (e.c.u.110.9) "the market is weak"-"the economic recovery in Italy will be slow and fragile"
- The second class highlights **the pressure of the virtual finance** ("**financial**" – singular -, chi2 12.69; "**derivatives**, chi2 6.76; "**hedge**", chi2 6.28: "**speculation**", chi2 6.10; "**financial** – plural -, chi2 5.65) on the **real economy** ("**resources**", chi2 12.04, "**dollars**", chi2 12.6; "**millions**", chi2 11.34; "**capitalism**", chi2 7.99; "**economy**", chi2 7.47), since the effect of numerous government interventions end up by reflecting themselves on common people, ri-proposing themselves as a **crisis of the real economy.**
- One can ask: " *which will be the next bank dropped on American tax payers' shoulders? Shoulders that are more and more fragile, because in the meanwhile the real economy does not give any signal of improvement*" (e.c.u. 418-14).

INTERVIEWS : SAMPLE

We have considered **three versions** (for Financial Advisors, for Investors through Financial Advisors and for Investor Autonomously online) of a multi-method set of instruments including several technique (from open and projective techniques to structured scales and closed questions).

The sample of this research line has been about 100 of people for each category:

- -**Financial Advisors**:97
- -**Investors through Financial Advisors**:97
- -**Online Investors**:90

We have distinguished our sample according to the kind of Banks and Insurance

- traditional banks (Banca Nazionale del Lavoro),
- innovative banks (Mediolanum)
- Insurance (ITAS)

in order to analyze the different ways of elaborating "trust" and other dimensions.

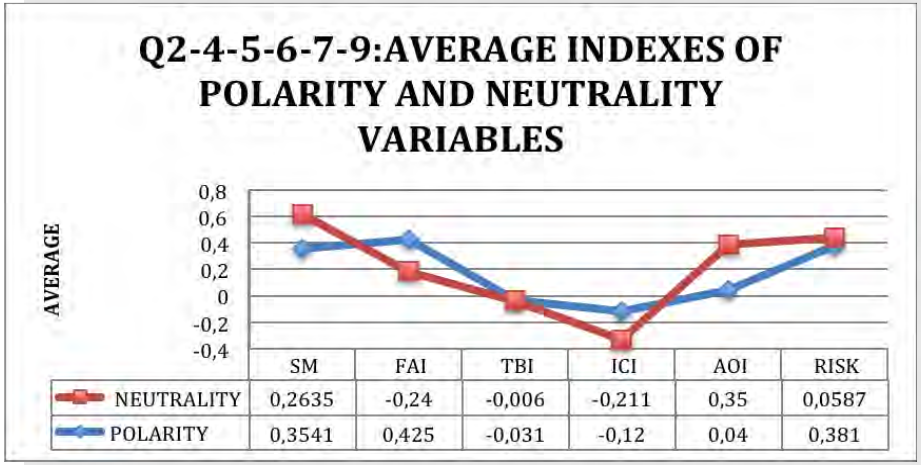
INTERVIEWS : DIMENSIONS

- Different dimensions to investigate:
- -the trust/distrust in the market, in the different economic and political actor's ability in capability of the financial crisis managementing, in the personal financial advisors and their degree of self-confidence as auto-directed investors;
- -the personal temporal perspective oriented to the past, present or future, and the related underlying psychological dimensions such as immediate gratification attitudes, tendencies to delay or delay tendency and sensation seeking;
- -familiarity with telematic tools (Internet, wireless services), correlated with positive representations and metaphors of the Internet, that obviate the need to work through financial and banking consultants.
- -level of financial expertise
- -propensity and tolerance towards risk (risk representations, general risk propensity attitude, financial risk behavior propensity, personal tolerance of market's fluctuations before and after the financial crisis)
- -"contrarian" attitude through the investigation of the investor'/financial advisor' behavior in case of a decrease of the stock value

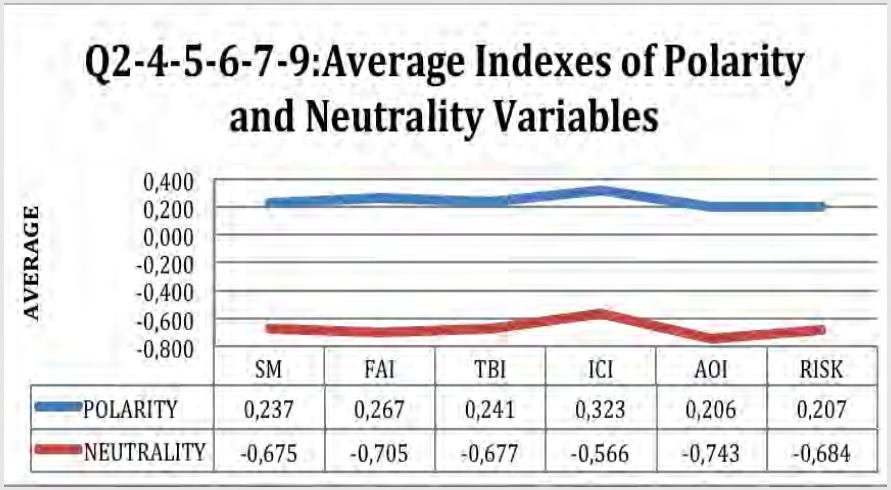
INTERVIEWS: DIMENSIONS

- -self-rating of the subject's financial profile (small investor, medium investor, big investor) according to the percentage of capital invested directly and indirectly in the stock market with respect to their entire family estate
- -percentage of invested saving
- -amount and percentage of the loss on the total of the invested saving after the financial crisis until now, using as starting reference point September 2008 as the starting point.
- historically scenario before and after the September 2008 financial crisis (using as point of reference September 2008), and to other dimensions concerning their perceived influence by media and different stake holders:
- -the perceived influence of various economic and political actors on subject's financial decision making,
- -the subject's economic behavior and his/her financial Crisis Explanations and Foreseeing,

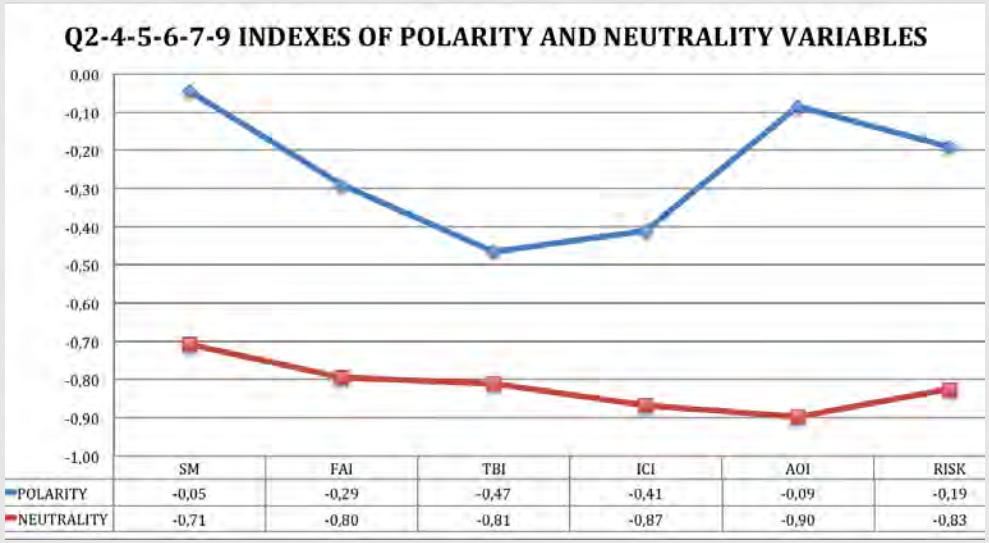
INTERVIEWS RESULTS: INDEX OF POLARITY AND NEUTRALITY



	SM	FAI	TBI	ICI	AOI	RISK
NEUTRALITY	0,2635	-0,24	-0,006	-0,211	0,35	0,0587
POLARITY	0,3541	0,425	-0,031	-0,12	0,04	0,381

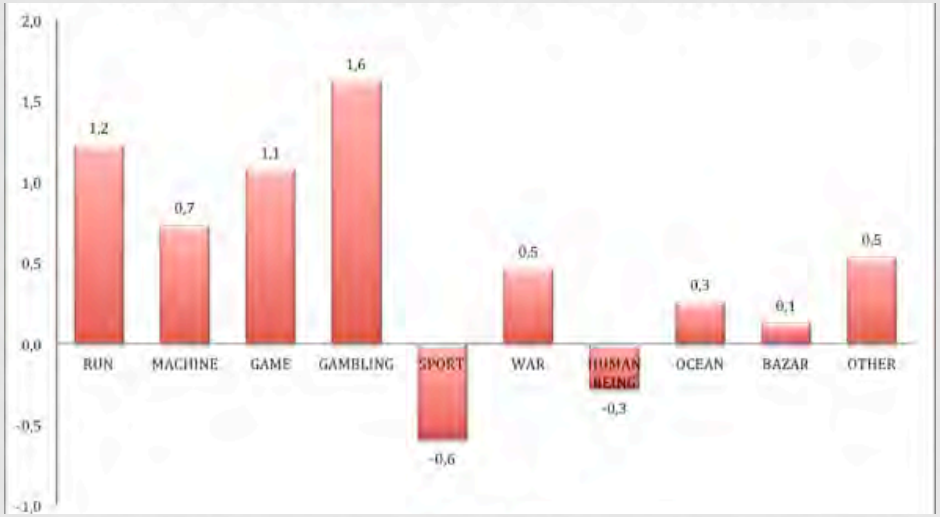


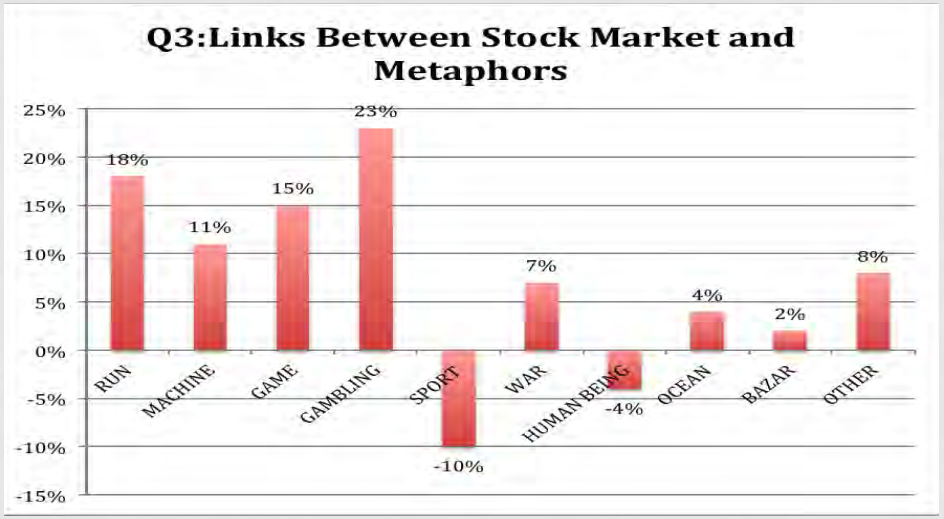
	SM	FAI	TBI	ICI	AOI	RISK
POLARITY	0,237	0,267	0,241	0,323	0,206	0,207
NEUTRALITY	-0,675	-0,705	-0,677	-0,566	-0,743	-0,684

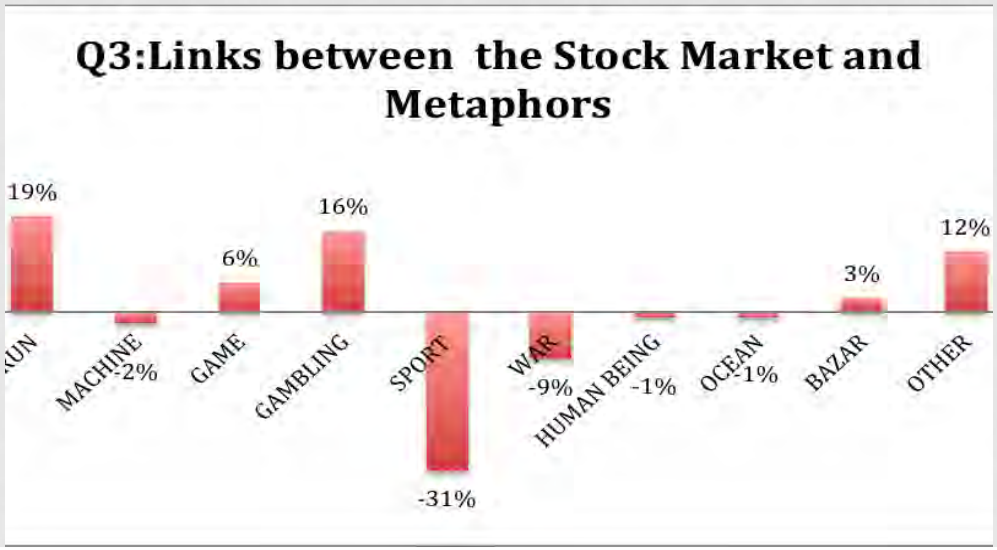


	SM	FAI	TBI	ICI	AOI	RISK
POLARITY	-0,05	-0,29	-0,47	-0,41	-0,09	-0,19
NEUTRALITY	-0,71	-0,80	-0,81	-0,87	-0,90	-0,83

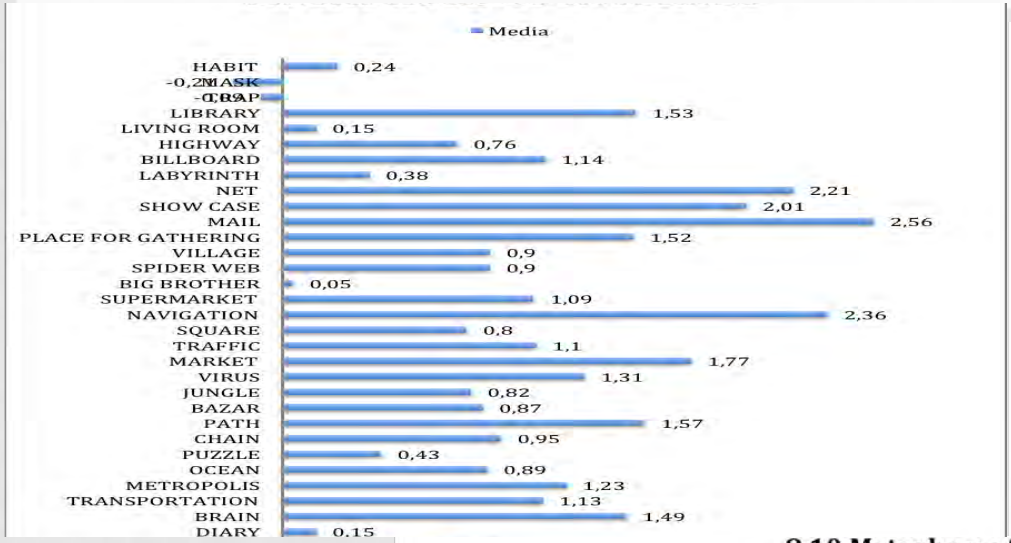
LINKS BETWEEN THE STOCK MARKET AND METAPHORS

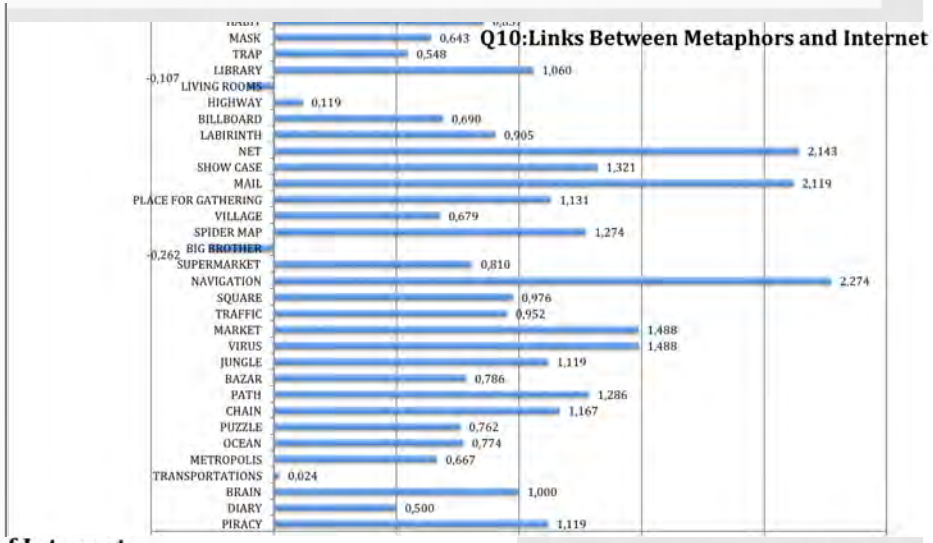


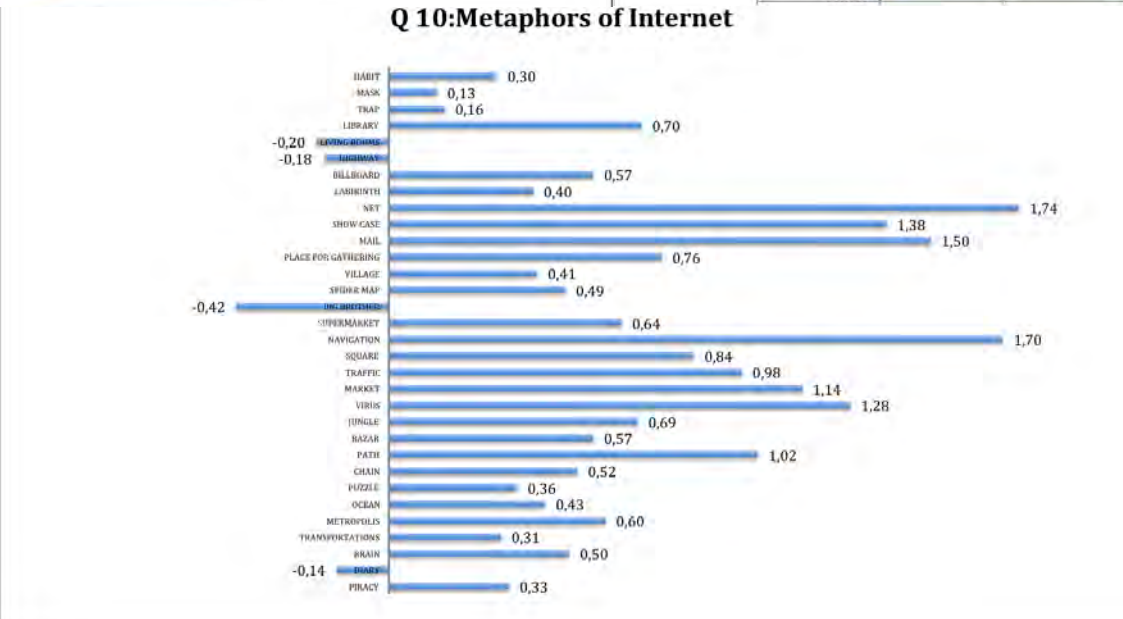




METAPHORS OF INTERNET

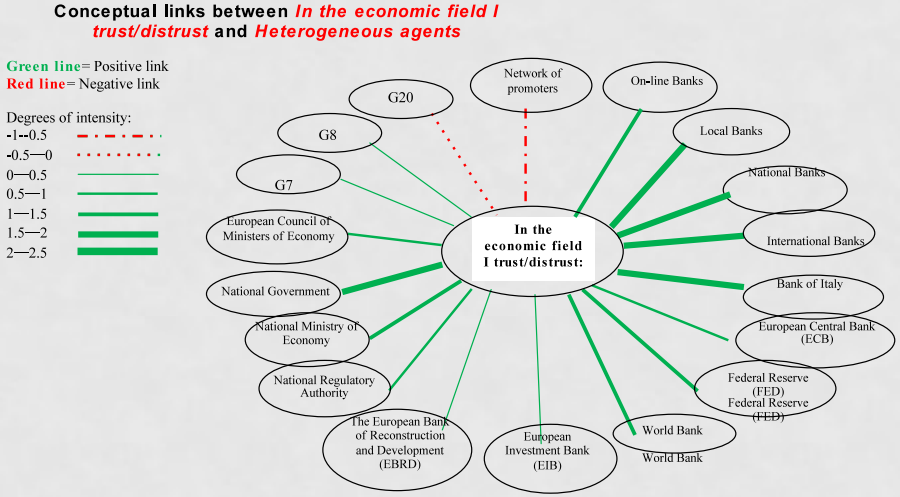


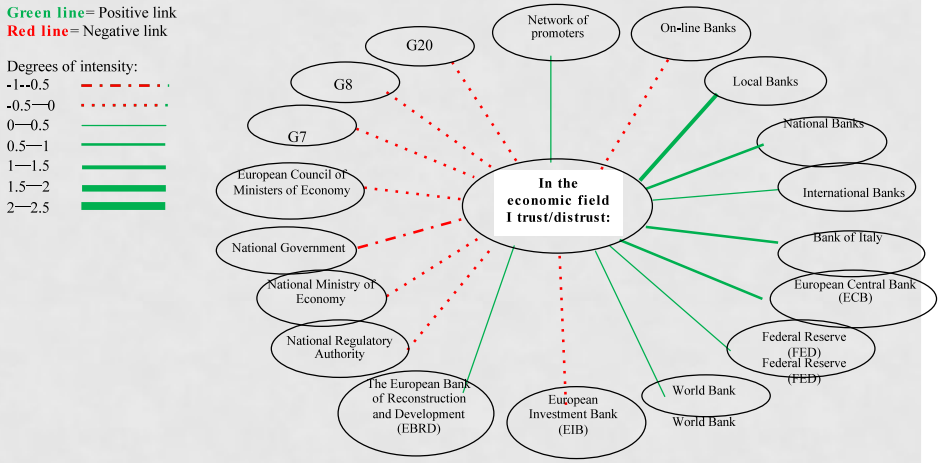


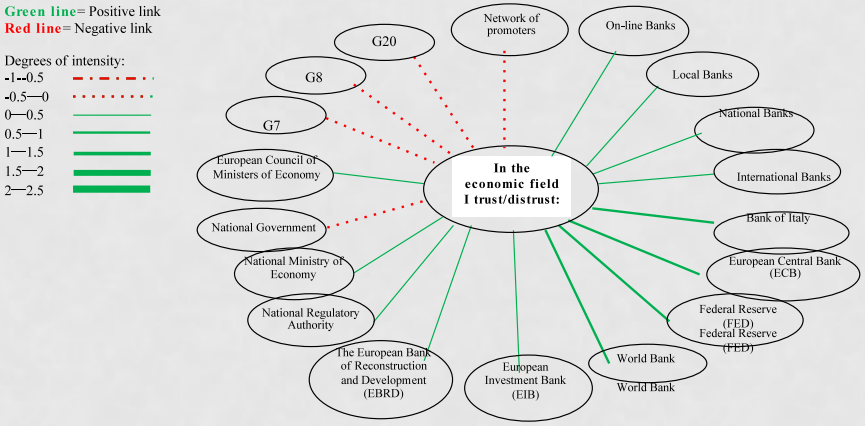


LINKS BETWEEN: in the economic field I **TRUST/DISTRUST** and *HETEROGENEOUS AGENTS*

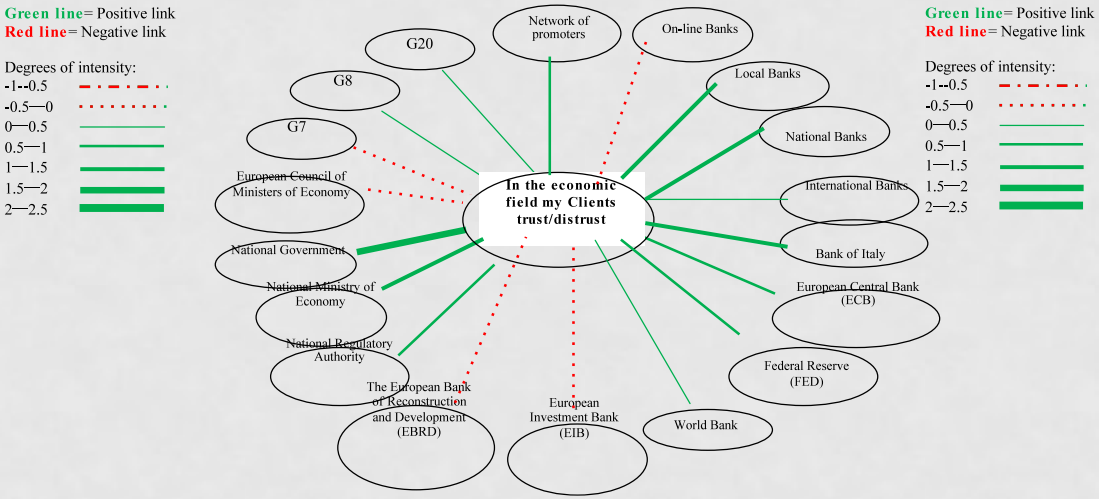
Conceptual links between *In the economic field I trust/distrust* and *Heterogeneous agents*

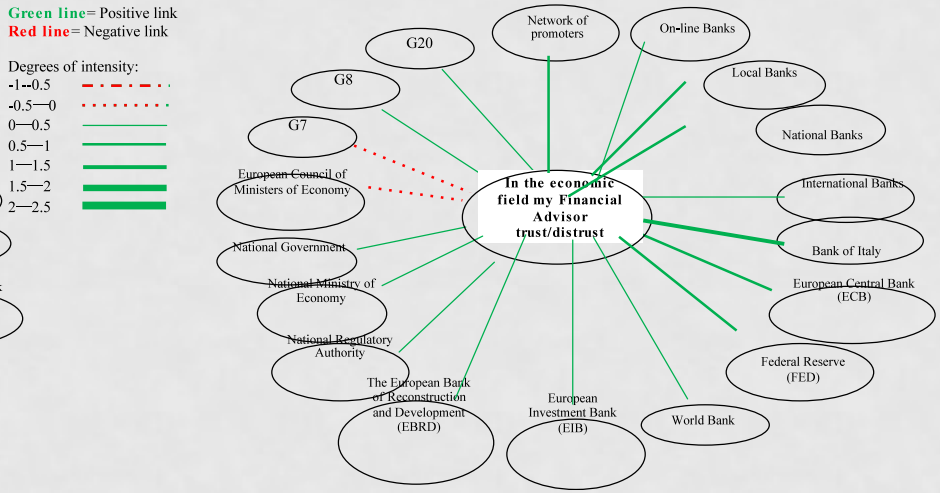




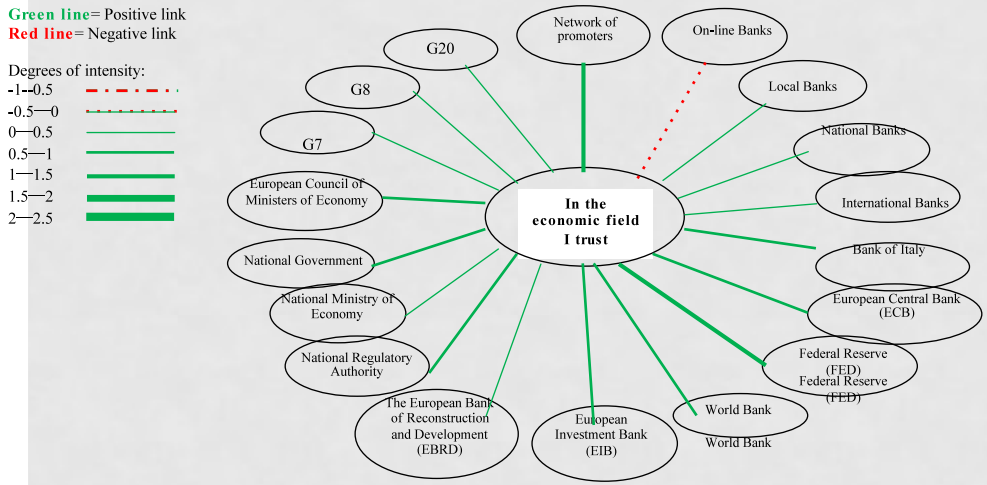


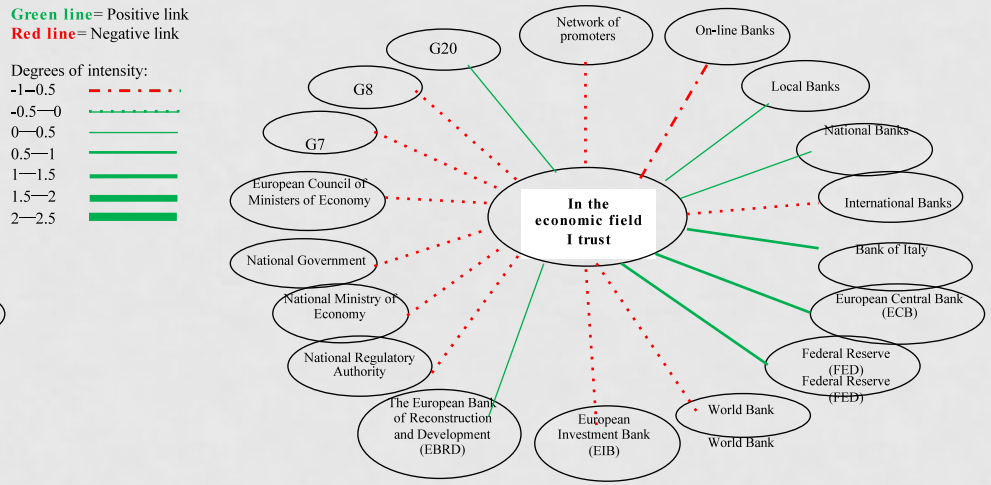
LINKS BETWEEN: in the economic field My Clients/My FA **TRUST/DISTRUST** and *HETEROGENEOUS AGENTS*

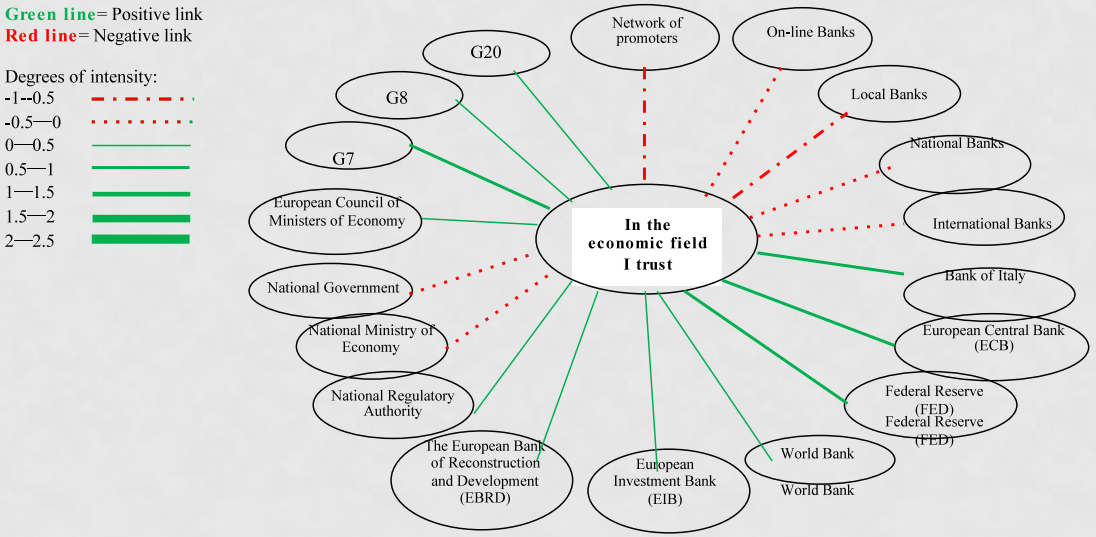




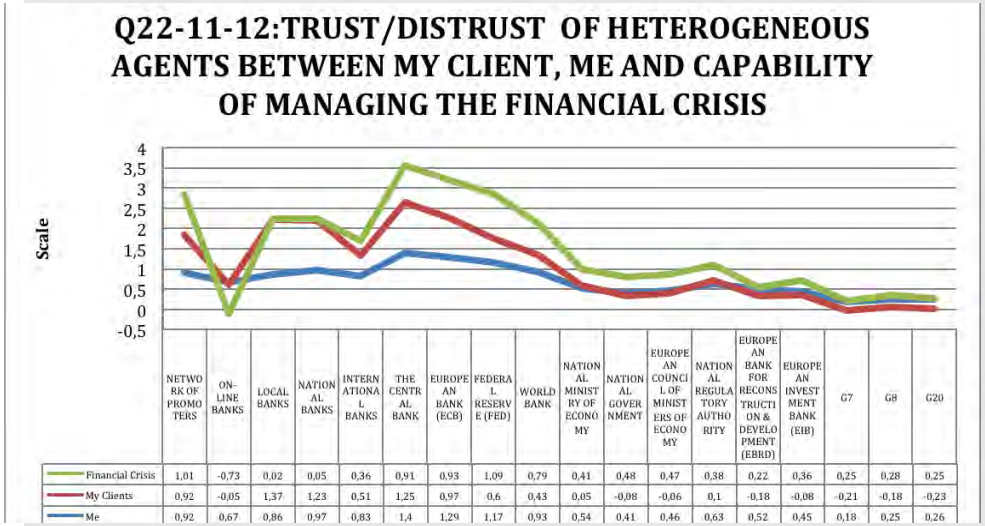
Conceptual links between *heterogeneous agents* and **trust** on their capabilities to manage the **financial crisis**

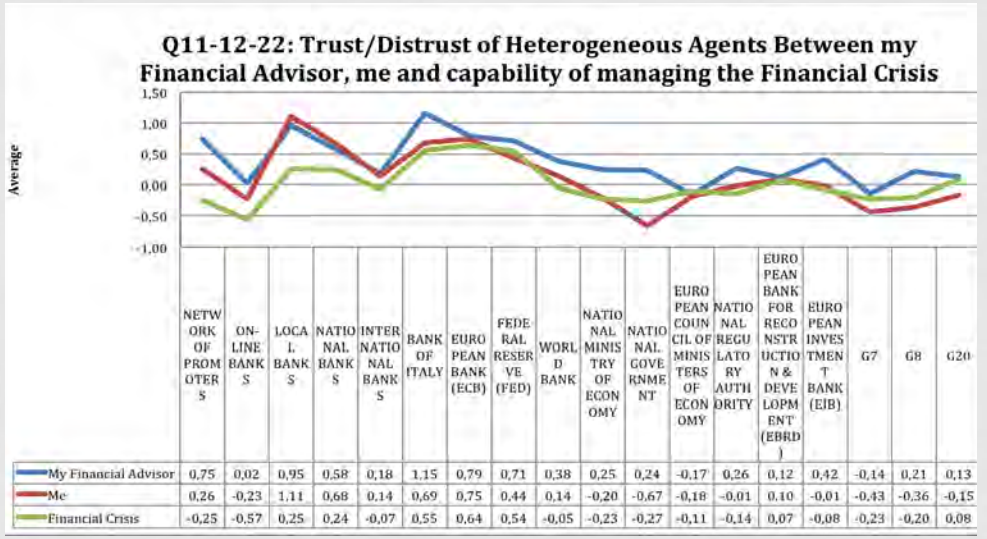


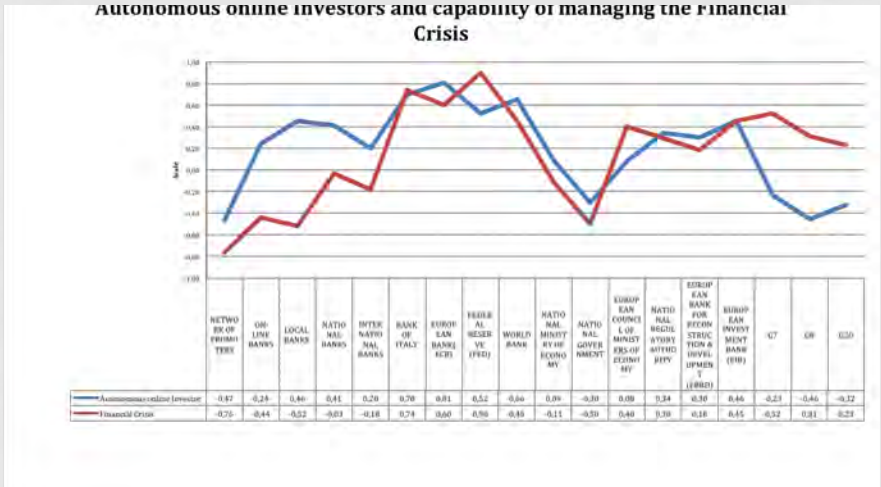




Trust/distrust of HA between my *FA/ clients, me* and capability on managing the **financial crisis**



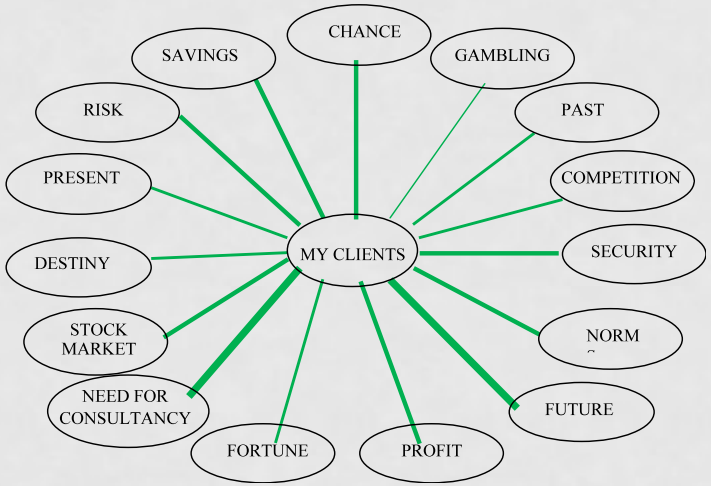




CONCEPTUAL LINKS BETWEEN MY CLIENTS/MY FA AND THE WORLD BELOW

Green line= Positive link
Red line= Negative link

Degrees of intensity:
-1--0.5
-0.5—0
0—0.5
0.5—1
1—1.5
1.5—2
2—2.5



Conceptual links between *My Clients* and the words below

Green line= Positive link
Red line= Negative link

Degrees of intensity:
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-0.5—0
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0.5—1
1—1.5
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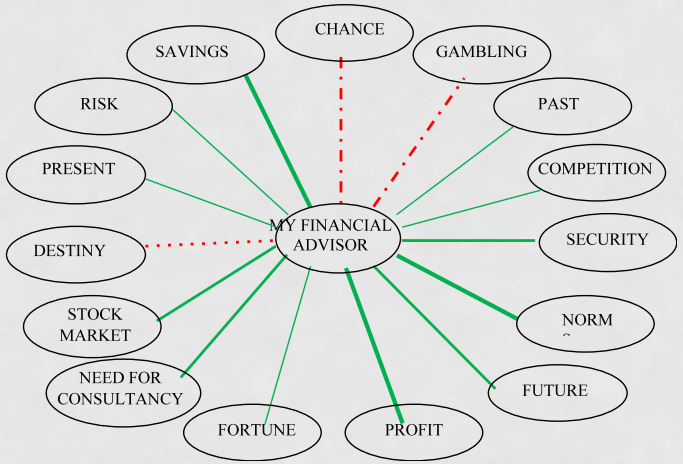
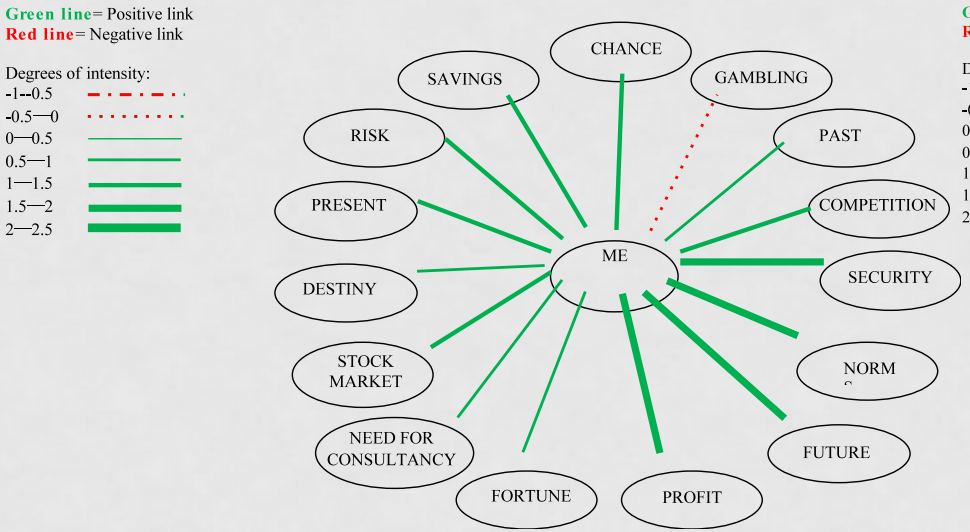
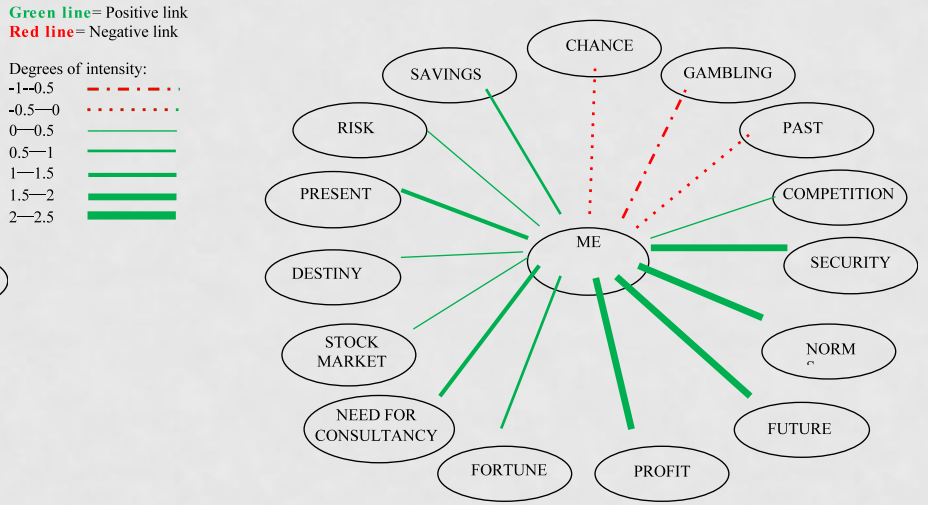
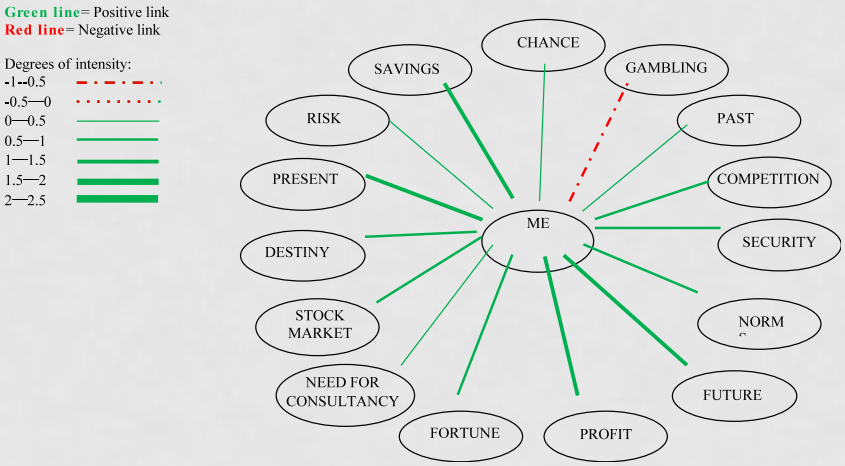


CONCEPTUAL LINKS BETWEEN ME AND THE WORLD BELOW







CONCEPTUAL LINKS BETWEEN STOCK MARKET AND THE WORLD BELOW

Green line= Positive link
Red line= Negative link

Degrees of intensity:
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-0.5—0
0—0.5
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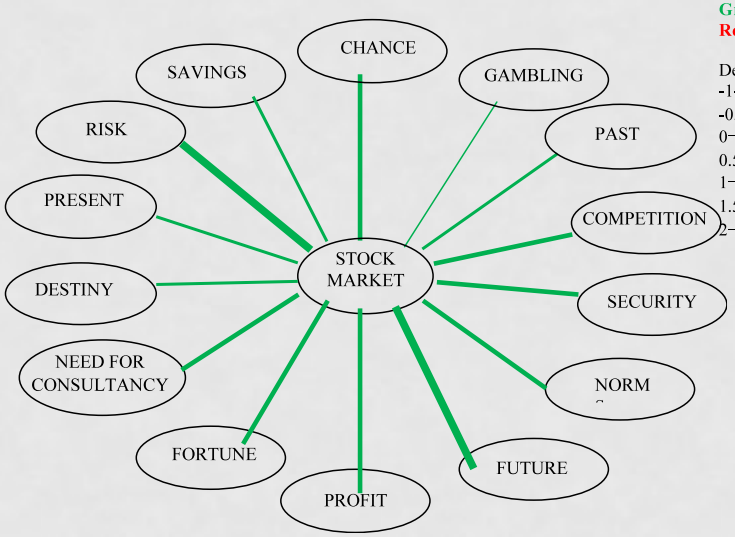
1—1.5
1.5—2
2—2.5



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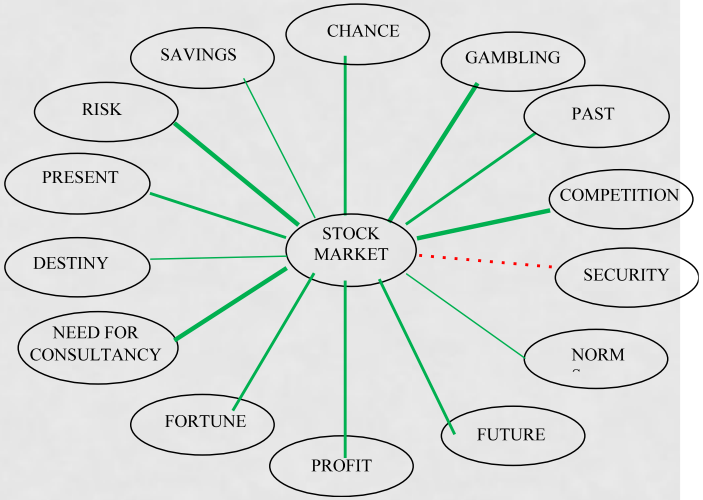

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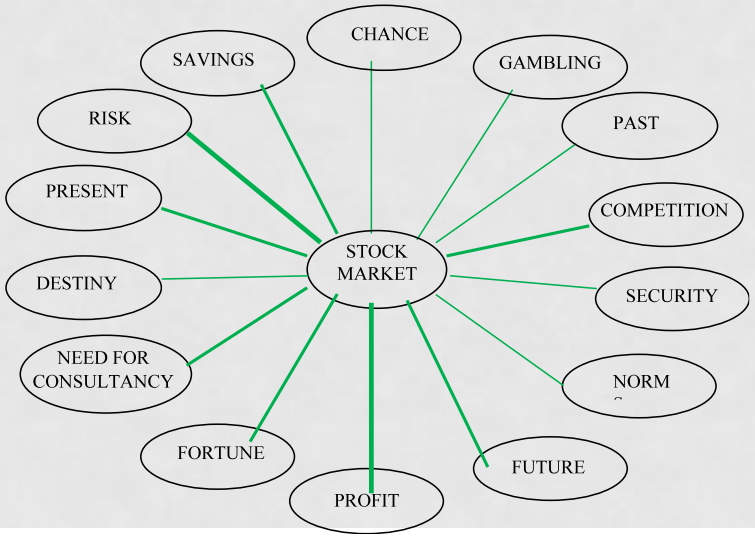
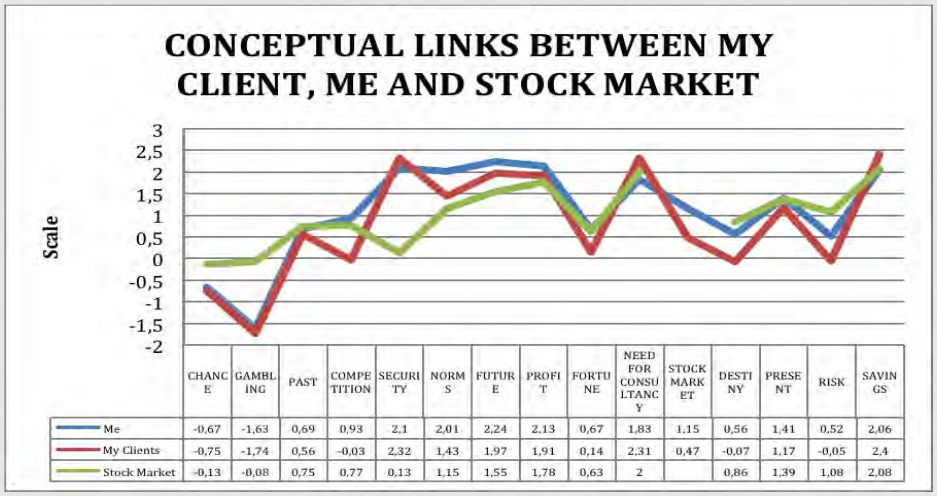
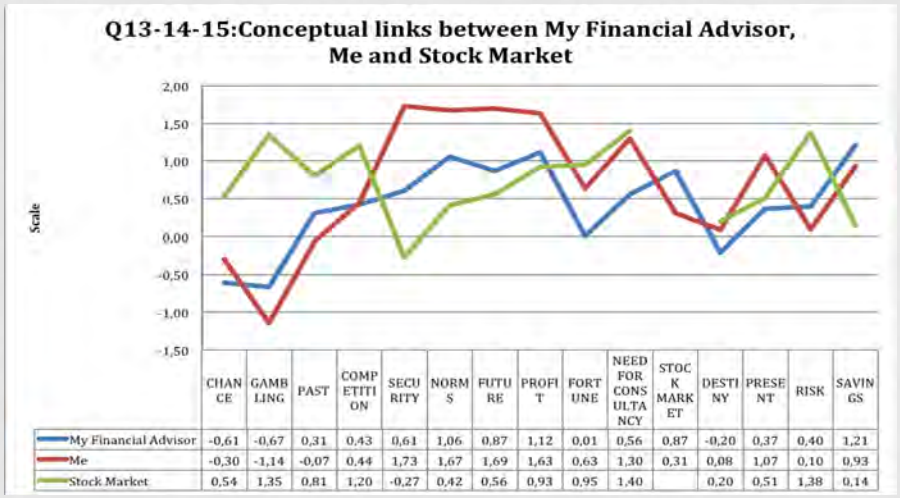


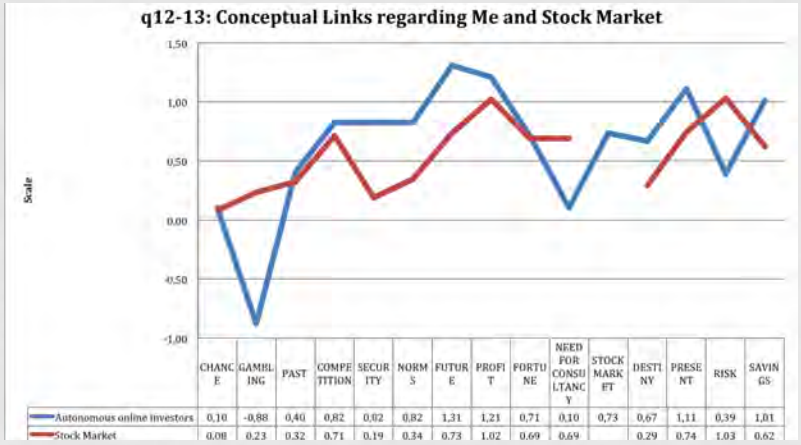
Conceptual links between *financial advisor/clients, me* and **stock market**



	CHANCE	GAMBLING	PAST	COMPETITION	SECURITY	NORMS	FUTURE	PROFIT	FORTUNE	NEED FOR CONSULTANCY	STOCK MARKET	DESTINY	PRESENT	RISK	SAVINGS
Me	-0,67	-1,63	0,69	0,93	2,1	2,01	2,24	2,13	0,67	1,83	1,15	0,56	1,41	0,52	2,06
My Clients	-0,75	-1,74	0,56	-0,03	2,32	1,43	1,97	1,91	0,14	2,31	0,47	-0,07	1,17	-0,05	2,4
Stock Market	-0,13	-0,08	0,75	0,77	0,13	1,15	1,55	1,78	0,63	2		0,86	1,39	1,08	2,08

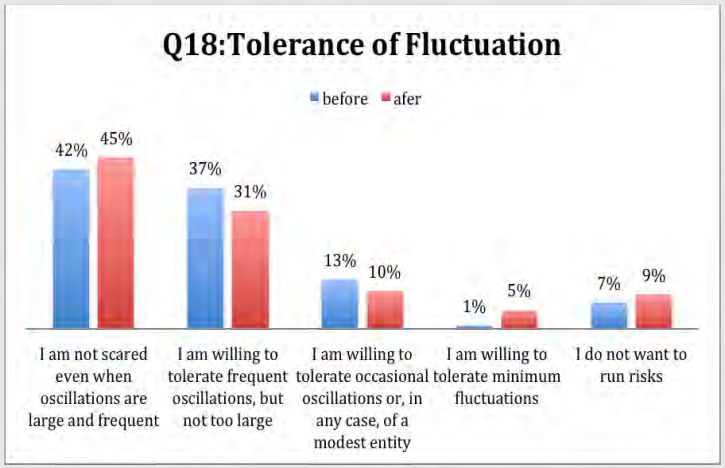


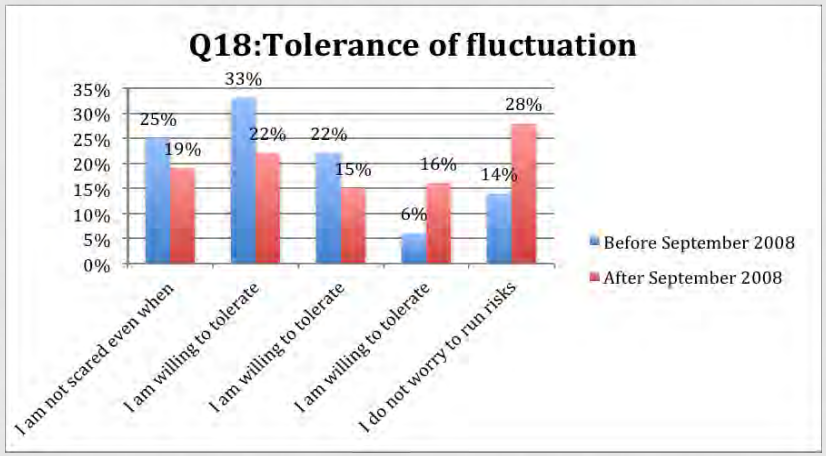
	CHANCE	GAMBLING	PAST	COMPETITION	SECURITY	NORMS	FUTURE	PROFIT	FORTUNE	NEED FOR CONSULTANCY	STOCK MARKET	DESTINY	PRESENT	RISK	SAVINGS
My Financial Advisor	-0,61	-0,67	0,31	0,43	0,61	1,06	0,87	1,12	0,01	0,56	0,87	-0,20	0,37	0,40	1,21
Me	-0,30	-1,14	-0,07	0,44	1,73	1,67	1,69	1,63	0,63	1,30	0,31	0,08	1,07	0,10	0,93
Stock Market	0,54	1,35	0,81	1,20	-0,27	0,42	0,56	0,93	0,95	1,40		0,20	0,51	1,38	0,14

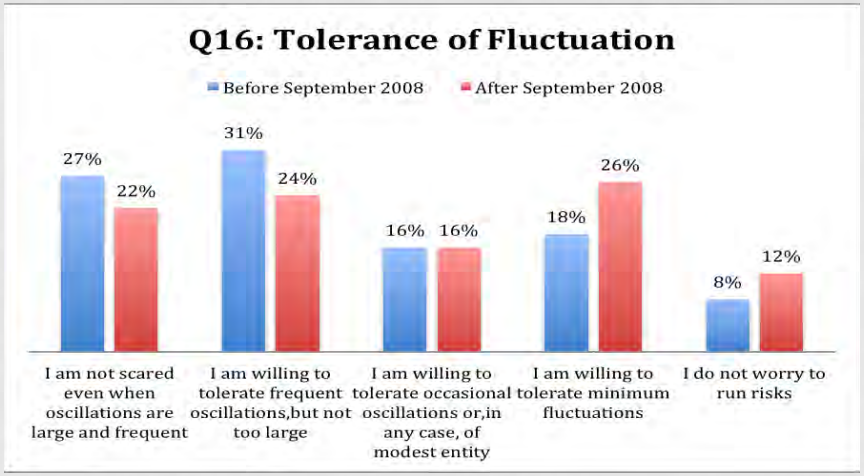


	CHANCE	GAMBLING	PAST	COMPETITION	SECURITY	NORMS	FUTURE	PROFIT	FORTUNE	NEED FOR CONSULTANCY	STOCK MARKET	DESTINY	PRESENT	RISK	SAVINGS
Autonomous online investors	0,10	-0,88	0,40	0,82	0,02	0,82	1,31	1,21	0,71	0,10	0,73	0,67	1,11	0,39	1,01
Stock Market	0,08	0,23	0,32	0,71	0,19	0,34	0,73	1,02	0,69	0,69		0,29	0,74	1,03	0,62

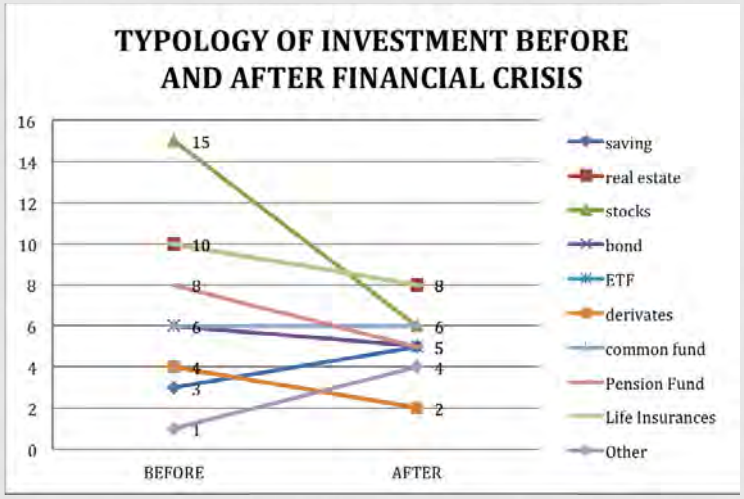
TOLERANCE OF FLUCTUATION

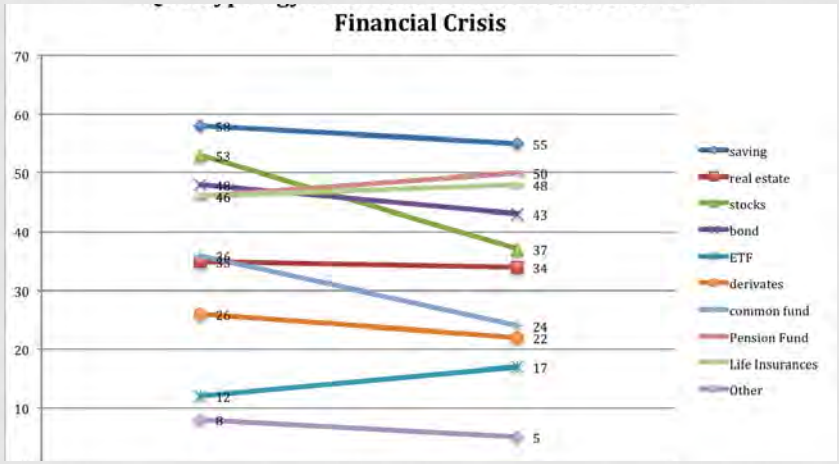


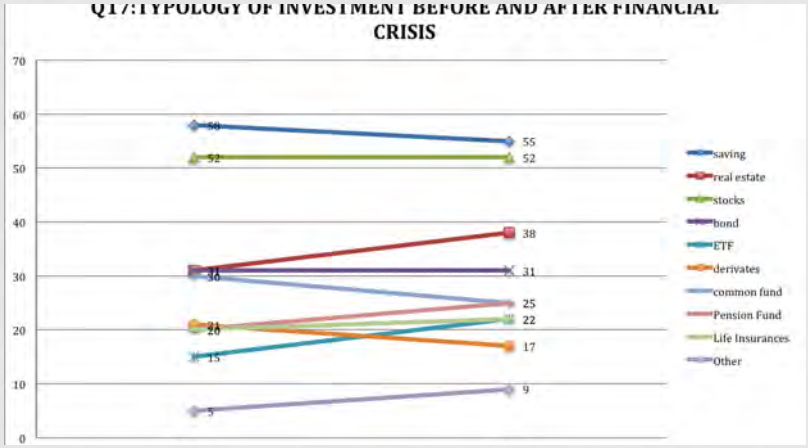




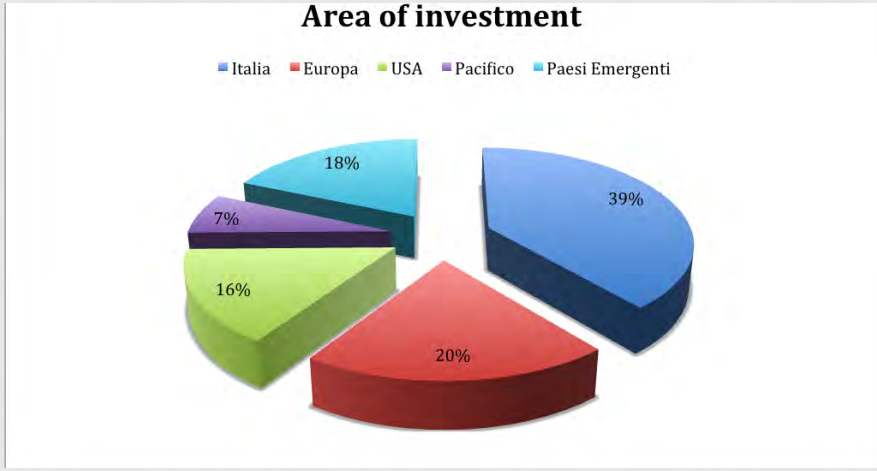
TYPOLOGY OF INVESTMENT BEFORE AND AFTER THE CRISIS

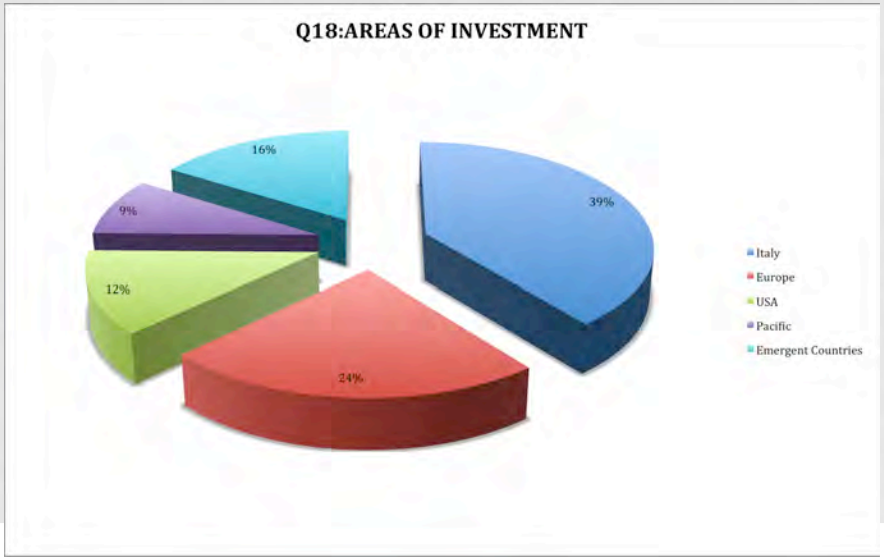




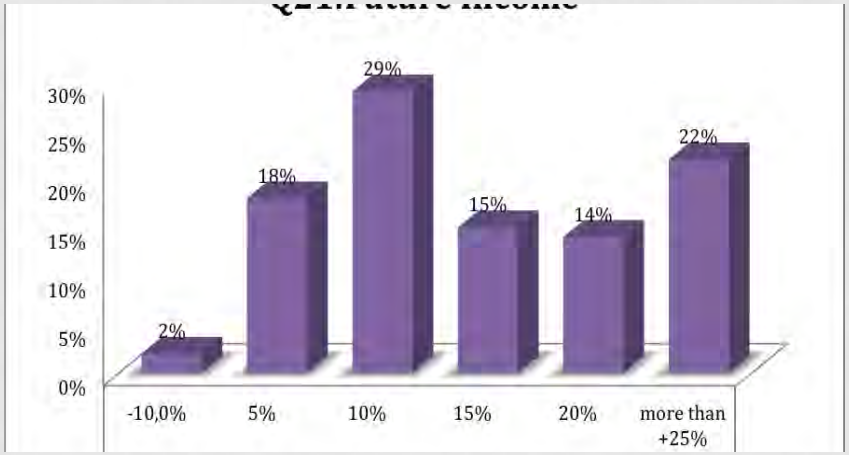


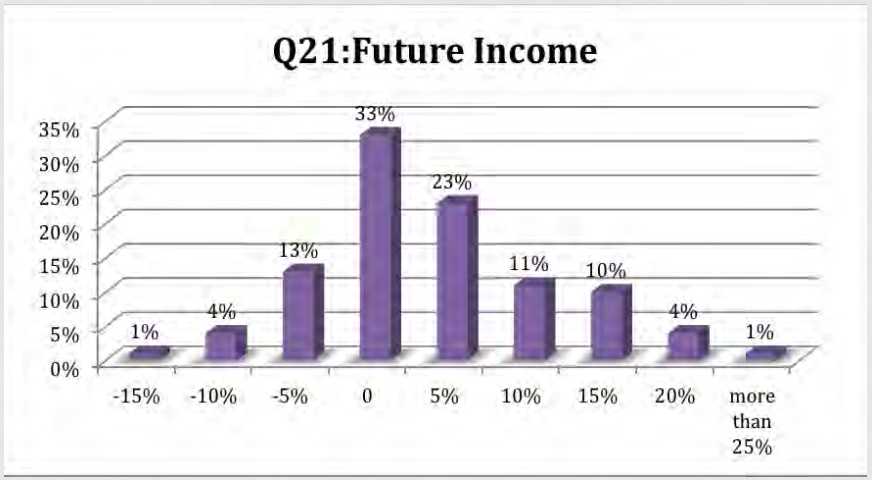
AREA OF INVESTMENT

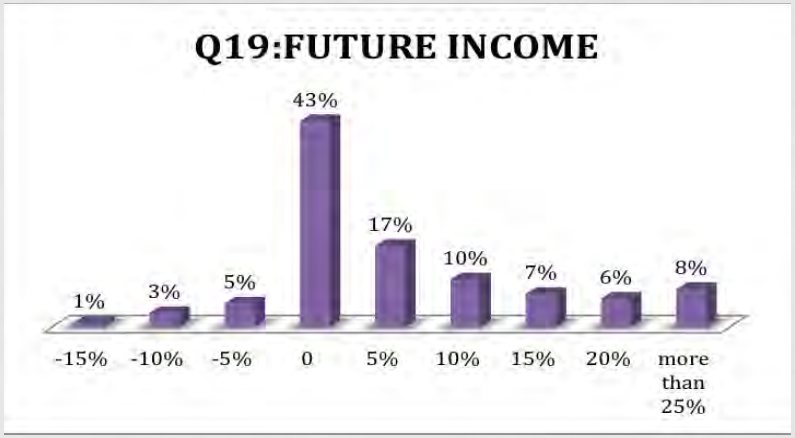




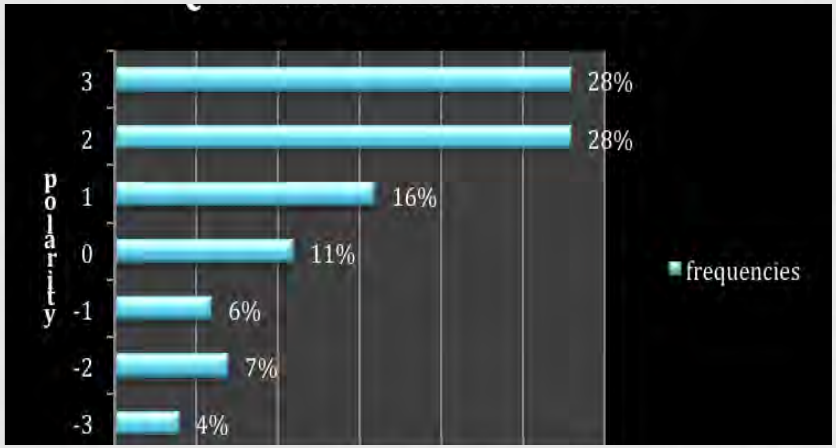
FUTURE INCOME

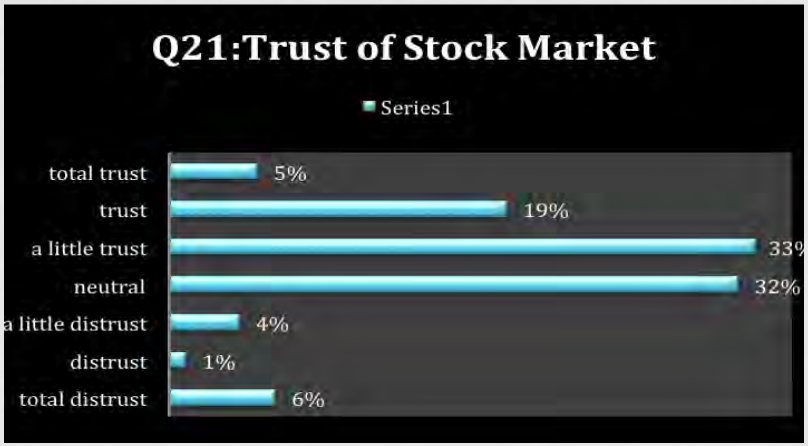




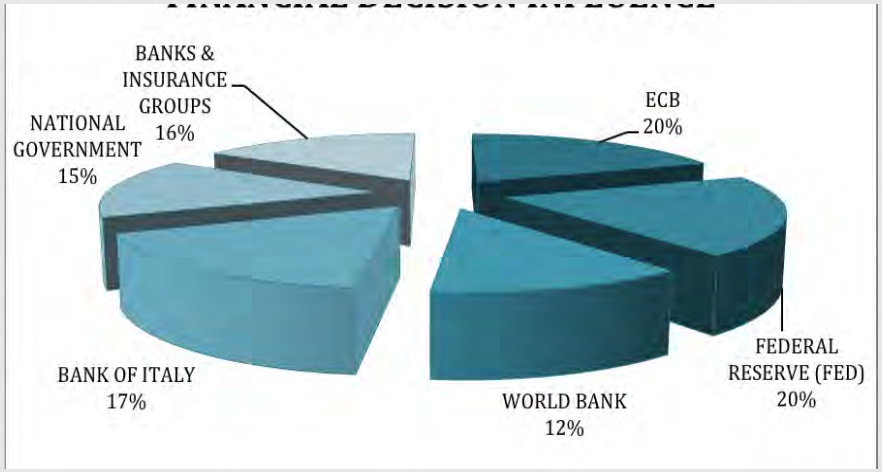


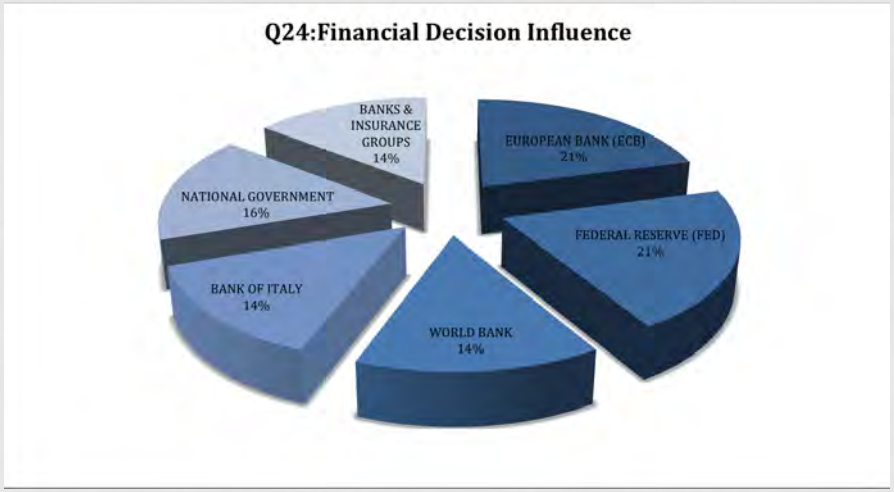
TRUST OF STOCK MARKET

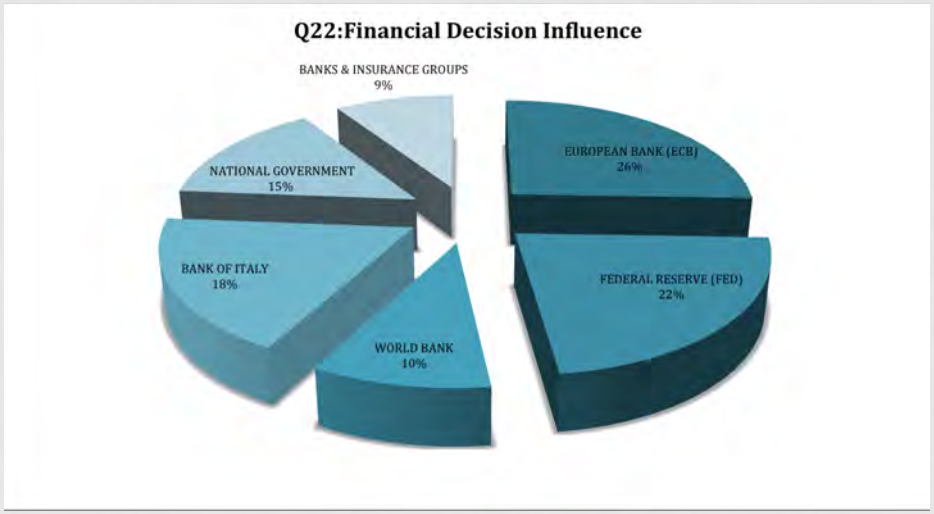




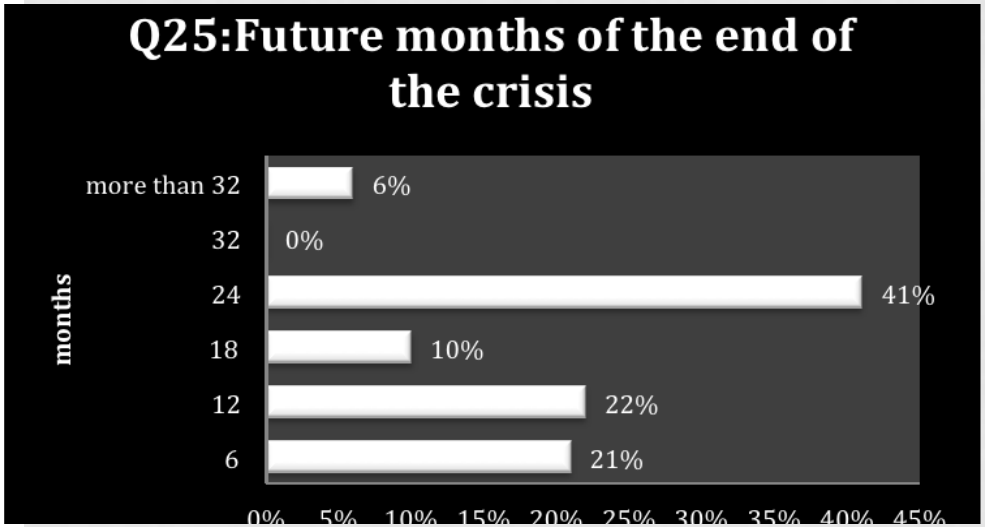
FINANCIAL DECISIONS INFLUENCE

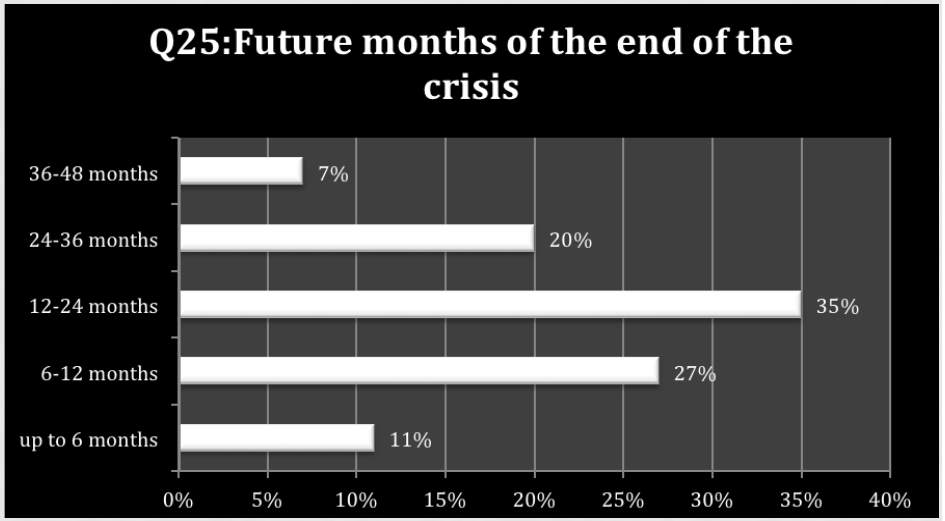


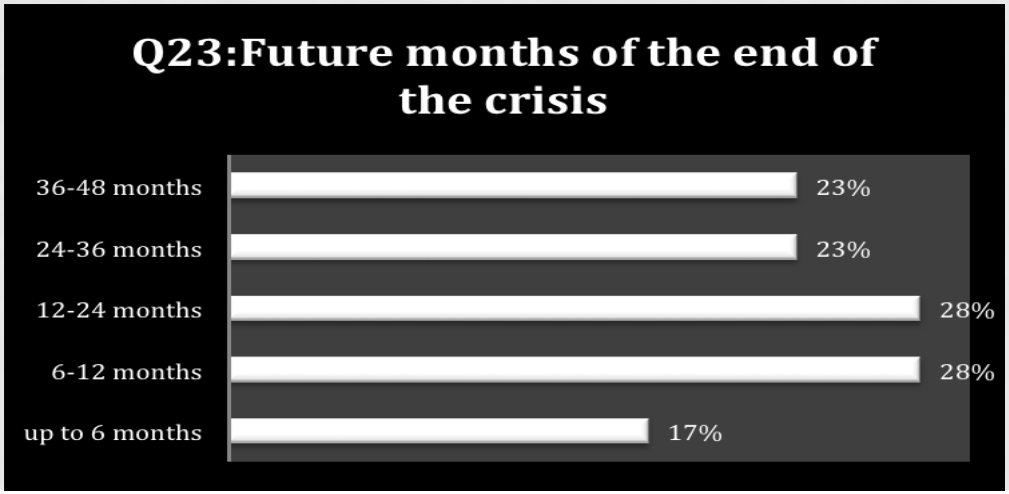




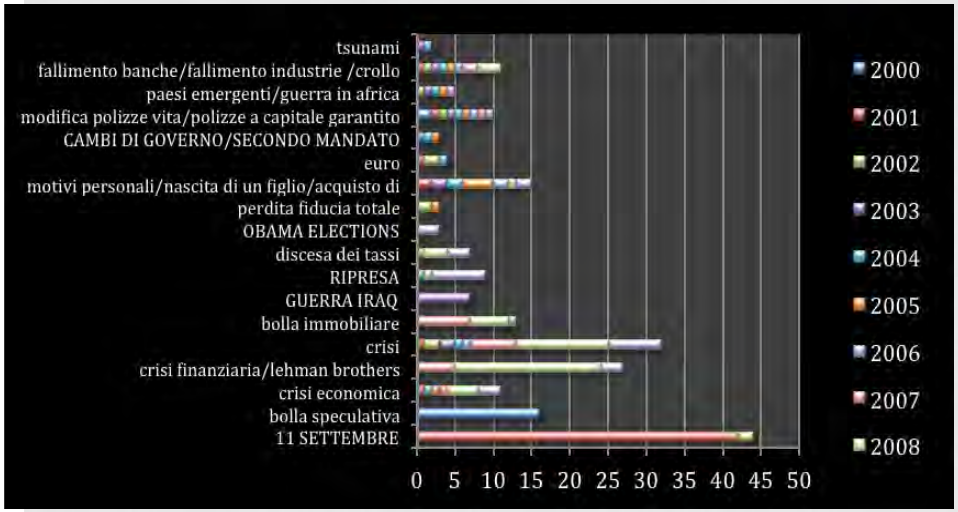
FUTURE MONTHS OF THE END OF THE CRISIS

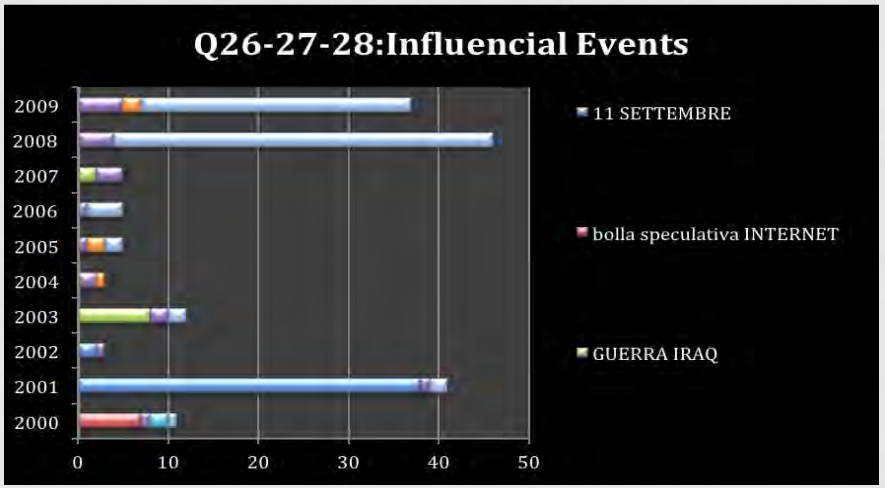


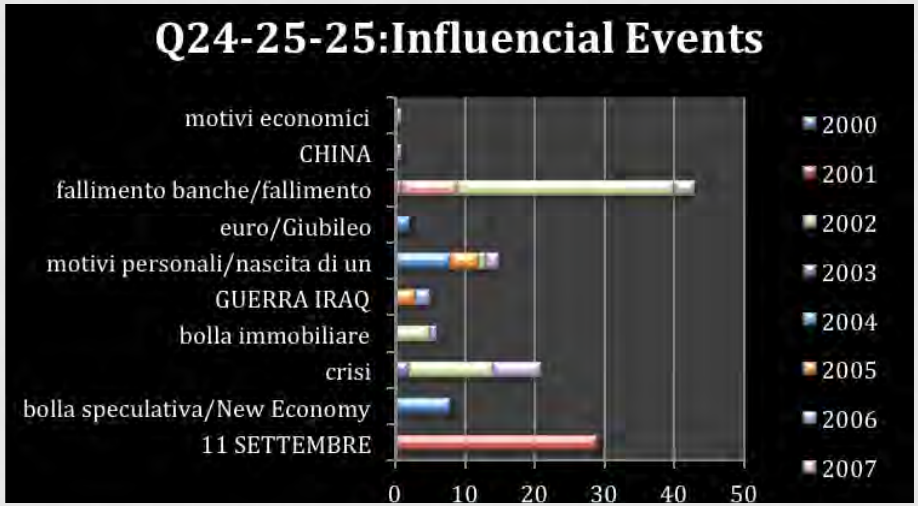




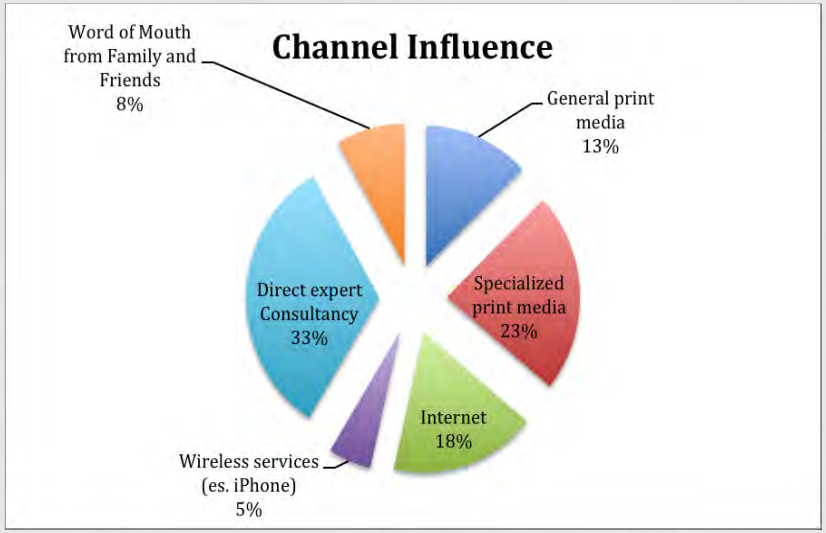
INFLUENTIAL EVENTS

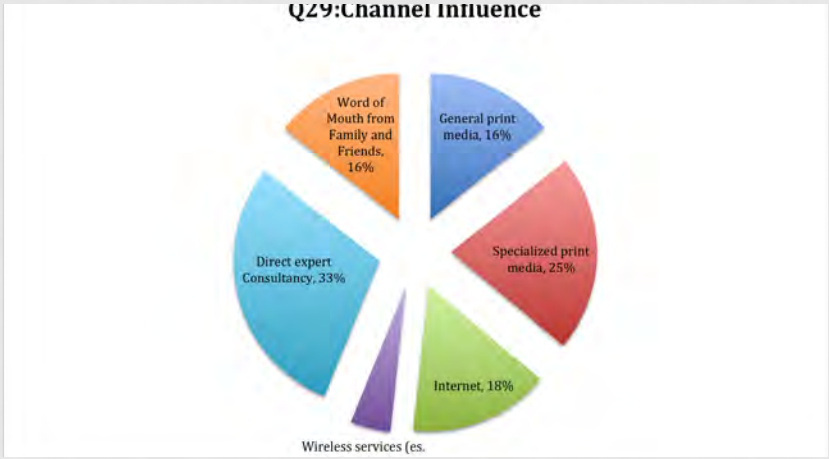


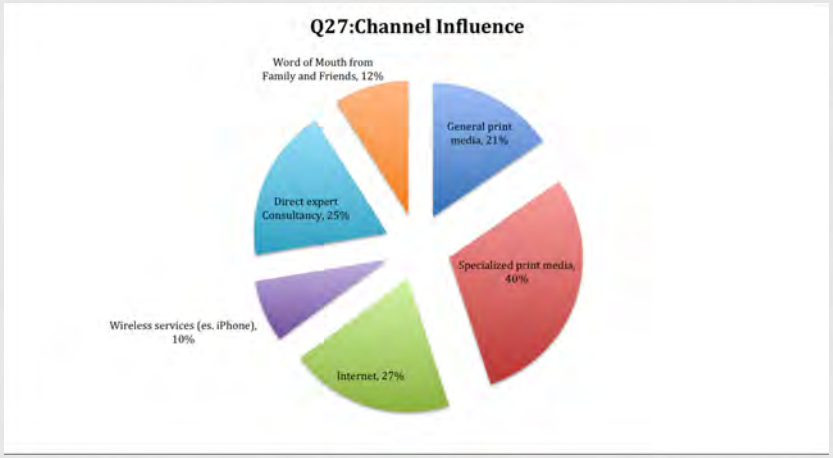




CHANNEL INFLUENCE







- **Thank you for the attention!**