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The use of metaphors in stock market reporting:

An Italian case.

Master Thesis

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Contents

Introduction

Information plays a fundamental role for both the financial markets, in order to allocate resources in a modern economy, and for investors, who need to process the data available on the market in order to implement a proper allocation of funds and earn profits from their investments.

In this scenario, the core theories used in traditional finance has provided a number of models that can help predicting investors' behaviour when choosing the optimal portfolio of investments.

These tools build on a simple but powerful assumption: investors make choices in order to maximize their own utility function. In order to do this, they rationally process all the information available and satisfy their own preferences, which are expected to be time-consistent and independent of the framing effect. However, both the behavioural finance revolution and the research in social psychology show that, when coming to real life, investors exhibit deviations from the standard models and biases in behaviour in terms of nonstandard preferences, nonstandard beliefs and nonstandard decision making (DellaVigna, 2009). The empirical evidence, in addition, demonstrates that deviations are not only affecting financial markets, but covers a broader number of applications, from consumption to labour supply, from finance to politics.

In this context investors are now violating rational expectations; are affected by framing and reference points in their attitude towards risk (Kahneman and Tversky,1979); tend to overestimate their own abilities (Lovallo, Camerer, 1999); tend to use heuristics when solving complex problems (Gabaix,2006) and are affected by emotions when making a choice.

In addition, individuals are no longer expected to maintain a level of risk aversion which is constant across time and events. On this argument some scholars, particularly Slovic and Olsen, state that risk is not an evidence-based phenomenon that researchers can easily observe and analyse. To be precise, Slovic defines risk as part of the individual survival risk, saying that humans have the ability of altering their environment as well as responding to it, and this capacity contributes to both the creation and the decline of risk. Moreover, he specifies that the concept of risk means different things to different people (Slovic, 1987) and that the same can be influenced by affect, which plays a fundamental role in risk perception of individuals. For example, if a person has a positive affect towards a specific company, he may be willing to invest in it as he may perceive the risk of the investment as much less as the risk perceived by another investor with a lower level of affect for the same company. What can influence this level of affect? A new relatively approach to these topics is to analyse the effect of language on perceptions and, therefore, behaviour.

In this sense, recent studies show that language and metaphors can have a strong influence on behaviour and judgment when borrowing from something that is well known to the reader and that is source of emotional reactions. Metaphors can indeed contribute to the creation of imagery, which in its turn influence affect, which plays an important role in the creation of return expectations and in the perception of risk. This phenomenon is known in economics and psychology as affect heuristic (Kahneman, Tversky, 1974); a mental shortcut that allows people to make quick decisions that are heavily influenced by their current emotions. On this, studies demonstrate that a positive affect can decrease the level of perceived risk and increase the estimate and returns expectations; on the contrary, a lower or negative affect can increase our perception of risk and decrease our expectations in terms of returns (Slovic, 2005). In addition, language can influence judgemental process and behaviours if the reader associates it with a strong, emotional element of his own experience. On the role of metaphors in influencing and explaining the behaviour of investors, the literature provides us a few number of studies that approached the topic from different perspective.

Boggio et al (2014) address the problem by the identification of metaphors used in websites dedicated to retail investors, comparing the results across Dutch, Italian and English databases. The findings show that the source domains from which metaphors are borrowed are limited and that most of the times they are taken from masculine domains. The limit of this work is that it is taking into account only a subset of the population: those individuals who are already interested in investing in the stock market. To overcome this problem, Prast et al (2016), carries on a similar study considering general newspapers 'articles and investigate whether metaphors can influence the attitude towards financial activities of a wider population. The findings of this work are in line with what Boggio et al shows: limited number of source domain and predominance of masculine metaphors.

Morris at all, on the contrary, approaches the study of metaphors 'impact on individuals from a different perspective, as the paper analyses the stock market reporting by making a distinction between agent and object metaphors instead of looking for the different source domains. Even in this case, findings show that the use of these two types of metaphors is not random, as they have different impact on investor's expectations.

This work aims at contributing to this new field of study by analysing stock market reporting in Italian national newspapers with a focus on the use of metaphors and the imagery created by the source domains that will be found, in an attempt to give a contribution to controversial puzzles in finance, such as the gender gap and the excessive trading.

In line with what the conceptual metaphor theory states and with the results found in Boggio et al for investor websites and Prast et al for Dutch newspapers, we expect to find that metaphors contained in the articles published by the Italian newspaper have been borrowed from a limited number of source domains and that these domains are mainly masculine.

The paper is structured as follows: in the first chapter the author will briefly present the major findings and studies that have been carried out in the past few years, coming in to the details of the analysis executed in terms of Behavioural Finance.

In the second chapter the reader will have the opportunity to learn more about the topic of this paper: metaphors and their role within stock market reporting. The third chapter will instead be focused on the objective of this study and on presenting the method, the databases that have been used for the analysis and the main findings. Chapter 5 will be about a second, separate research question on how gender may, or may not, play an important role in the use of metaphors in the financial reporting. The discussion and the conclusions will then be presented in chapter 6 and 7.

Chapter 1: Critics to the classical model and origins of the Behavioural Finance

As for most interdisciplinary fields, Behavioural Finance can be a rather elusive concept to define.

Since its creation, its main aim is to give an explanation to the multitude of inefficiencies and biases which characterize the financial markets and which have been almost ignored by the classical literature for decades.

Even if the official start of this field is recognized to be in 1980, there are economists who at the very beginning of the study of Finance came up with works and papers which were trying to explain the behave of people from a psychological and less rational point of view. Among these papers, readers surely know the theory of Moral Sentiment (Adam Smith, 1759), which is today considered a real scientific breakthrough and states that, as social creatures, psychology can be a better tool to study the behaviour of individuals, instead of rationality. As can be easily seen, this theory is not specifically related to any of the financial fields but it represents a good example of how the idea of person as rational animal was already criticized at the beginning of the century and that only from 1950 the image of the Homo Economicus[1] took foot in the economic landscape and remained there for the next decades.

Classical finance theories totally effused the idea that the psychology and the human characteristics of people can work against them in making optimal investments decision, assuming that all the investors act at any given moment in a rational manner. This basically means that a rational behaviour allows them to earn

[1] Latin translation for "economic human", in most economic theories the term is used to characterize an individual as rational and capable of choosing always the optimal option.

returns from the money they are investing in the stock markets and that rationality is required in order to beat the market and overcome tendencies.

Traditionally, the field of classical finance has been based on the concept of efficient market, and even if its meaning may vary across theories and economists, it is still considered one of the most important principles of the financial literature. Generally, an efficient market is meant to be a market where prices are correct and equal to the intrinsic value of the asset, resources are efficiently allocated and consistent with the Efficient Market Hypothesis.

Created in 1960 by Eugene Fama, the EMH asserts that when the market is efficient, the price of all traded assets is corrected and reflects all the information available to investors. In addition, the theory specifies that the efficiency is affecting the market under various degrees, depending on whether the price is including also the non-public information or not and that is why economists usually describe a market as strong (including public and private information), semi strong (all public information) or weak (past prices and returns).

The paradigm on which the EMH is based prescribed that all investors are identical and utility maximizers. In addition, they use the Bayes rule[2] to process the new information when they are available on the market and to make sure that their forecast is accurate. It is therefore the combination of expected utility and rational expectations to allow the market to be efficient.

The efficient market hypothesis has encountered the positive feedback of the academic world since the very beginning, offering to the researchers the opportunity for developing new theories based on the assumption of the rationality of the investors and on the correct price of the traded asset. The importance of this

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[2] Theorem about conditional probabilities which affirms that the probability of an event A occurs given that an event B has already occurred is equal to: $P(A|B) = \frac{P(B|A)P(A)}{P(B)}$

theory is well expressed by Michael Jensen[3] who, in 1978, said: “there is no other proposition in economics which has more empirical support than the EMH”.

Despite the numerous evidences and experiments that researchers brought to support the efficiency theory, a number of questions and uncertainty about this statement raised. In particular, at the beginning of the 80s, a small group of economists started doubting about the consistency of the classical theories.

If efficient markets really exist, why do economists register the presence of irrational events such as bubbles and how can they be explained without violating the efficient hypothesis?

In a few words, is it really possible to think that people are always completely rational when they are actively involved in the decision-making process? This is one of the questions who motivated economists to go beyond the traditional theories and looking for more reasonable explanations.

This feeling of dissatisfaction plus the massive development of more powerful technologies has allowed researchers to analyse in a more efficient way the huge amount of available data to prove the inconsistency of a large amount of classical assumptions.

The official start of the Behavioural Finance is fixed in 1979 when the paper: “Prospect theory: a study of decision making under risk” was released. Kahneman[4]

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[3] An American economist. Member of the Monitor Company Group which then became “Monitor Deloitte” in 2013. He holds the position of professor of Business Administration at Harvard University.

4 Daniel Kahneman : an Israeli-American psychologist famous for his work on the psychology of judgment and decision-making, as well as behavioural economics, for which he was awarded the 2002 Nobel Memorial Prize in Economic Sciences. His empirical

and Tversky[5], the authors, proved and stated that investors do not take into account the whole universe of potential outcomes and choose the optimal ones, but calculate the outcomes comparing them with a subjective reference point. In addition, people are usually loss adverse, which means that they are more willing to take the risk when they face a loss, while they choose safer investment when have to protect their gains.

The two psychologists were soon joined by Thaler, who in 1980 published a work about the phenomenon of mental accounting, defined as the habit of differentiating and assigning different function to each asset classes, which cause a detrimental effect on their consumption decisions.

Together, Kahneman, Tversky and Thaler began a massive body of literature known as “biases literature” on how investors make financial decisions, using both psychological and financial approaches in the attempt of filling the gap between classical theories and reality.

However, their works is just the tip of the iceberg, as other researchers have attempted to explain many other anomalies found in the market, which are considered a reliable counter evidence against the hypothesis of the efficient market.

This area of study include works based on the mispricing of assets, overreaction of markets (Thaler and Bondt, 1985), equity risk premium (Benartzi and Thaler, 1995; Asness, 2000) and limits of arbitrage (Barberis and Thaler, 2003). Another interesting finding refers to the excessive trading exhibited by man and the gender gap in stock market participation and trading (Barber,Odean, 2003), stating that

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findings challenge the assumption of human rationality prevailing in modern economic theory.

[5] Tversky: a cognitive and mathematical psychologist, considered the pioneer of the cognitive science.

the number of men involved in activities of investments is higher than the participation of women, leading to excessive trading and poorer results that the formers get from their activities. Brighetti and Lucarelli (2012) try to give a reason for the existence of this gender gap through the measure of the propensity towards financial risk and risk aversion, showing that there is no biological explanation in terms of innate risk aversion, suggesting that more studies need to be executed to come up with better theories.

Today is broadly accepted that investors are not fully rational as they often exhibit biases and use heuristics, known also as rules of thumb, in making decisions. In this sense, rational model assumes that deviations from rationality are possible and random and that their effect on the efficiency of the market cancel out, meaning that if there are only a few rational investors, they will still make markets efficient by trading. Behavioural Finance stresses this point and the empirical evidence on investors' behaviour shows that individuals do not diversify, actively trade, have the tendency to sell winning stocks and hold the losing ones and their forecast are far from being accurate, as they are often extrapolative and contradictory.

This irrational component of investors may explain lots of the anomalies which affect the market and that classical theories were never been able to explain according to their principles. Among these challenges the most evident ones are for sure the excess market volatility and the over-reaction to stock prices.

Behavioural economists state that if the market is not efficient and people are not fully rational is because the process of elaborating the new information suffers from heavy limitations (such has memory limitation) and because beliefs are based on heuristics rather than on Bayesian rules. Moreover, economists take into account that investors may over react to irrelevant information while ignore the relevant news. These limitations lead to four typical errors of misestimating the true probabilities and the reader should keep in mind all of them in order to better understand the results of the work presented in this paper.

First of all, researchers individuate the Forecasting error, which implies that people weight too much recent experience and underweight past events.

The second feature is represented by Overconfidence, process through which investors overestimate their abilities and the precision of their expectations. According to psychologists, this may cause investors to underestimate the risk of an investment.

The third feature is given by Conservatism, which affirms that people usually underreact to new and important information.

Finally, the last important element of the behavioural finance is Representativeness, which states that investors often infer a trend from a small sample.

All these findings allow us to get a broader and more precise picture of what a financial market really is.

What people should keep in mind is that the success of the psychological approach does not imply that the insights from the rational expectations cannot be consider valid anymore, as they still cover a great role into the economic behaviour. What economists have tried to demonstrate is that investors systematically violate the rules imposed by the traditional literature.

As Stateman[6] (1999) said: "Standard finance people are modelled as rational, while behavioural people are modelled as normal".

In this scenario, this work is an attempt to explain how investors' behaviour and biases may be influenced by language and how metaphors can leverage the four anomalies stated above exacerbating the irrationality and the deviations of people. If it is true that people usually underreact to important information which may going against previous beliefs, it is also true that language has to be in charge of catching the attention of readers to make them focus on anything that can be of interests

[6] Professor at the University of Santa Clara, his researches are mainly focused on Behavioural finance and show how managers make financial decisions.

for them. In addition, people suffer from limited attention, which prevent them from taking into account all the information available on the market, considering instead only those data that seems more attractive and do not required too much attention to be processed. In this sense, understanding how metaphors are used and if they are not neutral to readers can be of great support for further researchers and application of new instruments among financial newspapers.

Chapter 2: Metaphors, finance cognitive theory and financial market.

For most people metaphors are essentially a matter of literature and imaginary, typical of language rather than daily life. However, researchers in the latest years have showed on the contrary that this particular feature is constantly present in our everyday life, both in language and actions and that the way our conceptual system is structured determine how people perceive external factors, how they relate to the world and to other individual.[7]

Looking at the things that people do in their daily life, even the smallest ones, it is easy to see that most of times the way they act and think is more or less automatic, driven by invisible boundaries and lines that are everything but obvious. One of the way researchers, including behavioural economists and cognitive psychologists, have tried to analyse them is through a deep study of the language. If it is true that communication is based on the same system who controls individuals' actions and thoughts, then it is easily understandable why language can be considered a fundamental key for how and why people behave in a certain way instead of another (Lakoff, Johnson, 2003).

Strongly related to this concept, the introduction of the Conceptual Metaphor Theory (CMT) marks an important revolution in the studies of linguistic and metaphors. By the use of metaphors, the ability of people of expressing own experiences and abstract concepts increases, allowing us to improve the use of language in an unlimited way. In a few words, a conceptual metaphor plays a role in allowing people to understand an abstract idea (or conceptual domain) in terms of another, which is usually more concrete and closer to the individuals. In addition, the theory asserts that there is a set of systematic correspondence and preferences between target and source domains. Studies such as those from Boggio et al (2014) and Prast et al (2016) show indeed that metaphors are usually borrowed from source domains related to health, nature, human body, games and sports, forces and movement, building and constructions. These source domains are mostly used

[7] Metaphors we live by, George Lakoff and Mark Johnson, 2003.

to make target domains more concrete as, in general, the concepts that need to be expressed refer to topics related to emotions, morality, society, economy, politics and actions. This idea and the examination of the process was first extensively analysed by Lakoff and Johnson in their book *Metaphors we live by* (2003) and secondly improved and expanded by other cognitive psychologists (i.e. Gilles Fauconnier, author of works such as *Mappings in Thought and Language*, 1997 and *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*,2003).

The vision that individual has of the world is deeply conditioned by the language he uses to express himself, and a metaphorical concept has the ability of structuring his everyday action. To see this, let's focus on the concept of Argument and in particular on the expression ARGUMENT IS A WAR, which can easily be recognized as metaphor.

It is immediately recognizable that most of the time people refer to argument with expressions that come from the domain of war ("Your claims are indefensible!")

Moreover, you can win or lose an argument, you defend your positions while attacking the one of your opponent, and you plan strategies in order to prepare for a discussion. Here it is interesting to see how individuals does not only talk about argument in terms of war, but the way they argue and behave in front of an argument is structured, from a certain perspective, by the same concept of war. Even though there is no trace of physical war, there is still a verbal conflict and the structure in which the action of arguing is built (strategy, attack and defence) reflects it.

In a few words, the essence of metaphor is to understand and to experience one thing in terms of another. This particular feature influences the shape people give to things and the way they react in front of a particular event.

But another characteristic of metaphors, perhaps the one that is most useful for the work presented in this paper, is that referring to a topic or an object in terms of something else, lead unavoidably to hide some aspects of it while highlighting others. In a world were individuals have available an attention which is limited and that is cached by what is more familiar to them, it seems reasonable to believe that the use of a specific language may cause a positive (or negative) reaction in people, causing affection or disinterest towards a specific topic.

Changing the type of language according to the specific situation is something that all people do, and many recent researches pointed out that it is a common practice even in the mass communications' world (broadcasting, publishing and newspapers); media have a great influence on peoples' behaviour and choice, not only due to the news they decide to share, but also for the way they do it.

Why is that true? If there is a bond between what a news is saying and the reader, it is possible to state that language may cause regret, affection or disaffection. We can think that the way language is used to present the specific event may cause a specific reaction, depending on whether it confirms the previous opinion or not.

Numerus studies about the strong influence of language on people thoughts and behaviour have been executed in various field, and they all proved the existence of this link. If this is true, the writer of this paper has all the reasons to believe that the same results may be get when studying the use of language in the stock market reporting.

One of the most common thought about Finance is that it is essentially a complex and continuously evolving field. This complexity makes the financial tools, theories and applications difficult to be understood from people who may not have received a financial education or are not really interested in the topic.

How can a newspaper give news about finance to people who may not understand technical words or may not be willing to spend so much time in trying to understand an article? This is one of the problems that a national journal should take into account when it decides to talk about financial topics.

The first aim to keep in mind is therefore to simplify the concepts, make them more appealing and understandable. This is the moment when technical terms are left behind to give space to other words, used in our everyday life, which are able to evoke images and feelings closer to the reader than a financial word will ever able to be. This is how metaphors happened to be involved in the reporting process.

Let's focus for example on the crises of 2008 and on the way newspapers and politicians have used language and metaphors to describe the difficult period that the global economy has been through.

"Red warning lights are once again flashing on the dashboard of the global economy", in this way David Cameron[8] reformulated the image of economy as a broken-down vehicle.

Back in 2011 George Osborne[9] did promise that "we would ride out of the storm", when comparing the economic crises to a meteorological phenomenon, while in the US Warren Buffet[10] viewed the financial crises as an "economic pearl Harbour" and accused in part the "financial weapon of mass destruction", such as derivatives, to be responsible for it.

These are all clear examples of how a metaphor can be used to express financial concepts and events when talking to a general audience and not always these examples are so easy to be found.

What is not clear, is the effect that these kinds of metaphors have on people.

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[8] A British politician who was Prime Minister from 2010 to 2016 and leader of the Conservative party from 2005 to 2016.

[9] George Gideon Oliver Osborne is a British Conservative party politician, member of the Parliament from 2011 until May 2017 and he served as Chancellor of the Exchequer under Prime Minister Cameron from 2010 to 2016.

[10] An American business magnate, investor and philanthropist. He served as the CEO and Chairman of Berkshire Hathaway.

According to Deirdre McCloskey[11], author of *The rhetoric of Economics*, metaphors cannot be considered as a simple pasted-on ornament because they are consequential and newspapers, economists and politicians should choose very carefully the vocabulary they are using when expressing important concept that may affect people's behave. Essentially, vocabulary is dangerous. If the words chosen are too strong, people may get worried or overreacting, while not even pay attention to important concerns when the language is flat and neutral.

Another concern that the author must take into account is that identifying metaphors may be easy, but assigning a domain from where the metaphors is borrowed is another issue.

Let's go back to our first example, war as an argument.

Two people involved in an argument prepare a strategy and attack the position of the opponent.

If it is true that this image reminds the concept of war, it is also true that it may reflect also the concept of chess game. Also in this case, there are two opponent who plan a strategy and try to attack the position of the other. At the same time, a chess game can be seen as a war, and the way around.

What is it true and what is not? How to avoid the risk of being too subjective in this analysis? Unfortunately, there is no univocal answer.

The metaphorical figures, in order to have an impact on psychology and behaves, must necessarily leverage on the direct experiences and on the culture of people. In this way, they generate an infinite vastness of different aspects, whose importance varies among people.

That is why a person may see a war instead of an argument why another one may consider it as a game.

[11] Deirdre McCloskey is a distinguished professor of Economics, History and Communication and the University of Illinois at Chicago.

Moving to the next chapter, we will enter in the details of the research and the methods used in this paper.

Chapter 3: Metaphors in financial literature, the research and the methodology

3.1 Metaphors and former financial literature.

As the author has already highlighted in the former chapters, this work finds its origins in the intention of analysing the use of metaphors in financial articles published on daily national newspapers.

One of the necessary assumption that has been made it is that this literary feature is actually able to provoke imagery and affection in people and influence their behaviour.

It is important to keep in mind that if this hypothesis should prove to be true, we do not expect to find any homogeneous result on how the behaviour is actually influenced. As it has been pointed out, one of the most attractive sides of a metaphor is that when it is highlighting something, something else is kept hidden. Of course, a detail that can catch the attention and cause a positive feeling in a person, may have a completely different effect on another one. That is why it is not possible for researchers to have a specific and rigid rule for the effects of metaphors on people and why we find different statements and theories across papers. What the studies do show is that there is a shared preference for the use of certain domain targets by newspapers and other mass media.

The status of the literature that we have is currently massive; for simplicity, we will limit to talk about the most famous and important ones. One of the first paper is the one presented by Whites who, in 1997, compared the metaphors that appeared in three different newspapers (Financial Times, The times and the Sun) during the currency crises of 1992. What he found out is that for each metaphor, the number of source domains they are taken from is quite limited and, in the specific case, they are mainly related to concepts of war, animals and meteorological events.

In 2001, Charteris-Black and Ennis decided to carry out a similar study using a different database, composed by articles from Spanish and English newspaper which were published in 1997. In this case too, the results the two researchers obtained show a preference for metaphors coming from the world of nature, war and health.

After this, many other studies based on the same line were carried out, taking into account different year of analysis and/or different database.

With the paper by Morris et all (2007), a first real change in the methodology of the study was first introduced. The aim of the paper was not to find the source domain of metaphors but to divide them in two separate categories: agent and object. According to this new categorization, it was possible for Morris to state that the different effect on people's behaviour and beliefs could be explained also applying this new methodology. An agent metaphor is defined as the use of words related to an animate being to describe a situation in an inanimate context, such as the stock market. On the contrary, an object metaphor describes a specific event as if it is influenced by external factors. Of course, when the increase of the stock price is described as an alive being, people tend to trust it and believe that the trend will continue, causing an optimistic and positive affection toward the event, while the same affect is not obtained when the increase in price is described as the result of changes in external elements.

In the Italian scenario, we can surely remember Luparini, who in 2013 compared English and Italian newspapers to prove that the source domain was the same regardless the differences in language.

One of the most interesting aspect of all these studies is that, regardless the different languages and different cultures, the results obtained show a common pattern and preference for the domain sources that have been used.

War, natural disasters and health apparently well explained a shock in the financial environment, causing in the reader a strong feeling of concern.

As the reader can surely notice, all these researchers have been focused on the aspect of the specific source domains of each metaphor and the meaning assigned to them by the writer. Limited attention was instead given to the reader.

Boggio et al paper is the first one who is actually focused on the characteristics of the readers, introducing as new hypothesis to be tested the existence of a difference in the impact on the receivers.

As we already pointed out in many occasions, the reactions vary according to the different experience and personal bents.

Among the possible factors that may explain the difference in reactions, Boggio suggests the existence of a gender component. If we focus on the source domains that have been identified in previous researches, we can easily see that the images they create are more easily to cause affect in male readers. Topics related to war, for example, does not align with the image of a woman, usually identified with concept of kindness, love and protection. Why is that?

Maybe this is due to the fact that the number of men who are practically involved in financial fields is notoriously higher than the number of women.

However, the analysis was conducted on articles published by websites specifically dedicated to retail investors, which means that people who were reading those articles already have a knowledge, even if limited, of finance.

However, no or few researchers focused on the same topic but analysing general newspapers, which are obviously thought for a broader population.

This is also the aim of this project: analysing the domains and the gender of the metaphors that will be found in our databases composed by articles published by the Italian national newspaper LaStampa.

3.2 Methodology and findings

Our study is based on the analysis of articles from two different years and financial periods.

The first set of articles is taken from LaStampa of 1997, year in which the economy has been deadly shocked by the Asian crises, and it is composed by a total of 114 articles on economic and financial matters; the second set comes from 2015, year chosen also by Prast et al because it represents a recent period with no records of extreme stock market changes, and it is composed by 50 articles. In both cases, the articles we extracted from Lexis Nexis and from the archive of the newspaper, have been published in a window of time of ten days (from 24th October to 2nd November), in order to avoid the risk of incurring in a seasonality problem.

Choosing a period of stability and one of more turbulent characteristics gives us the opportunity to compare the use of source domains and metaphors depending on the specific situation of the market. The reader should notice that 1997 is the same year chosen by Charteris-Black and Ennis (2001) and by Prast (2016) for their studies. This will enable us to easily compare our findings.

At the beginning of our analysis, we thought about going through all the articles looking only for the word *azioni* (Italian translation for stock). However, the term azioni has a double meaning in Italian: it can mean stock but it can also mean action (as noun or as to do); most of the time indeed, the articles we found and that contained this key word were not referred to financial articles and did not mean "stock". Looking for just one keyword in those articles would have meant getting a very limited number of articles and results which could not be considered consistent.

That is why the analysis has then been expanded to all the articles strictly related to financial topics which included metaphorical expressions. Moreover, this choice allowed us to get a broader picture of how the metaphors are involved in the economic reporting, instead of focusing only on those related to the financial markets.

What are the implications of this choice? Mainly, a matter of time.

It is surely faster looking for just one word than reading all the articles one by one. Given the large amount of available data, we decided to read only a specific percentage of articles from each set.

After having taken notes of the most recurrent metaphors, we used the Simple Concordance Program[12] to find the frequency of these metaphors over the whole set.

We then got rid of all the cases in which there were no metaphorical expression or when there was no connection with financial topics, ending up with a total number of 67 articles for 1997 and 27 for the 2015.

As the table below shows, there is a huge discrepancy between the findings in the two different periods, but this is not surprising at all.

In 1997 the explosion of the Asian crises affected all the major markets all over the world, and every journal gave large space to the events linked to it.

Identifying a metaphor is the operation that actually took more time. Looking for such a specific thing it is not just a matter of "looking" for a single word, but it involves a huge effort in order to understand the context and the meaning of each sentence. In order to do this, we went on with our work keeping in mind one single rule: check whether words referring to economic phenomena and entities do it directly or whether they invoke another domain of usage. (Steen, 2002).

This means that, even if the technology has been useful to clean all our data, the author could not only rely on the abilities of a computer and a program to identify the metaphors.

[12] Simple Concordance Program allows to search for words and phrases in specific text files. The utility of this program relies on its ability to read and detect words written in different languages.

After having obtained a list of all the most used metaphors, technology has been involved to see the frequency with which each of them appear in the whole database.

This represented a tricky part, because the author was not only looking for a metaphor composed by a single world, but most of the time the metaphors involved a complete sentence, which forced to choose a key word for them. Moreover, the computer helped in looking for the number of time a word was used in an article, which implied that not always the word was used in a metaphorical way. For example, looking for the word "earthquake" may lead to a really high frequency, but after having eliminated all the situations in which the word is used literally, the final frequency is definitely lower.

To overcome this limitation, the author then had a look to the paragraph or the complete sentence in order to see whether we were in front of a metaphorical meaning or not. As the reader can fairly see, a human component has therefore been absolutely necessary to carry out this study.

The table below shows a summary of the number of articles and metaphors found in the databases provided by LaStampa for both 1997 and 2015. The number of metaphors is not limited only to crises period, but is extended to almost all the articles related to financial topics, even if in a lower amount.

The second step required to suggest and identify the source domain of origin of our metaphors, defined as the domain from which metaphorical expressions are borrowed and draw. In general, the main distinction between source and target domain is that the latter is typically abstract, while the first is concrete[13] and this paper is trying to suggest, based also on the results of former literature, that the choice of using metaphors from specific domains is not random, but it is directly aimed to provoke some reactions in readers and, possibly, drive their attitudes. We

[13] Deignan A., *Metaphor and Corpus Linguistics*, 2005.

say therefore that the use of metaphors and the choice if the source domains is not neutral

The domains we identified are:

Health;

Physical Force;

Nature;

Physical activity,

Sense and Feeling

War/Conflict

Sea/Naval

Non-specific.

Table 1. Number of metaphors by source domain, per year

Category	1997	2015
Health/Wellbeing	33	2
Senses	39	2
Nature	113	0
Physical activity(motion)	41	1
Naval/Sea	3	4
War	9	5
Non-specific	11	3
Physical force	64	1
Total	**313**	**18**

Source: author's database

Table 2. Metaphors Categories by % of total, per year

Category	1997	2015
Health/Wellbeing	11%	11%
Senses	12%	11%
Nature	36%	0%
Physical activity(motion)	13%	6%
Naval/Sea	1%	22%
War	3%	28%
Non specific	4%	17%
Physical force	20%	6%
Total	100%	100%

Source: author's database

Table 3. Top3 source domains, per year

1997

Nature;

Physical Force;

Physical Activity (Motion)

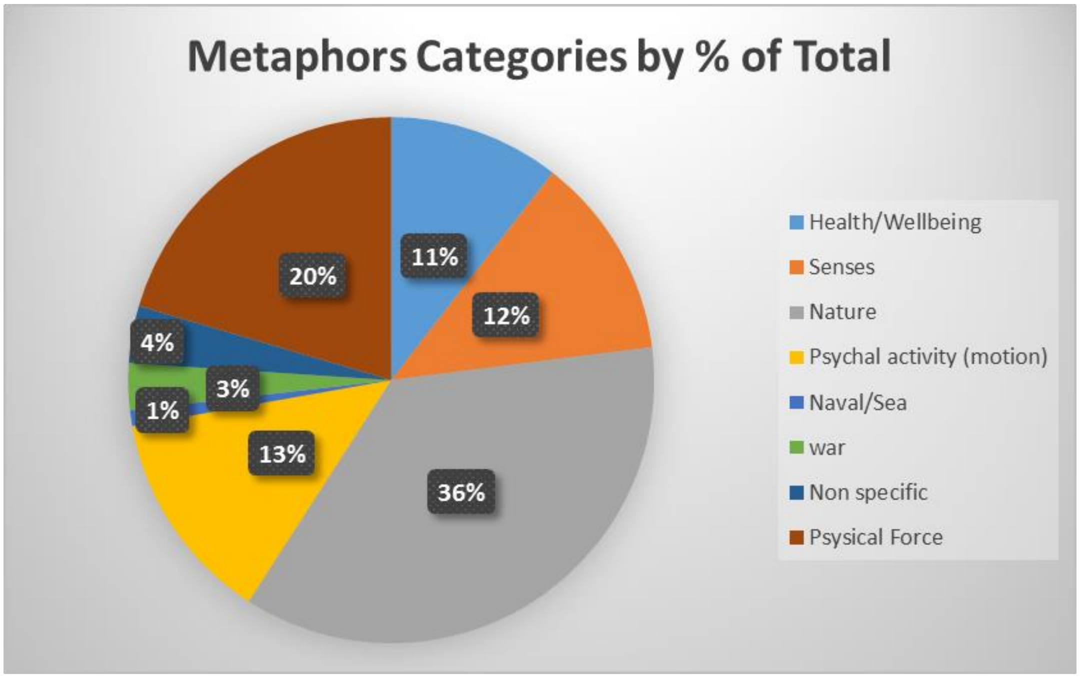
2015

War;

Sea/Naval;

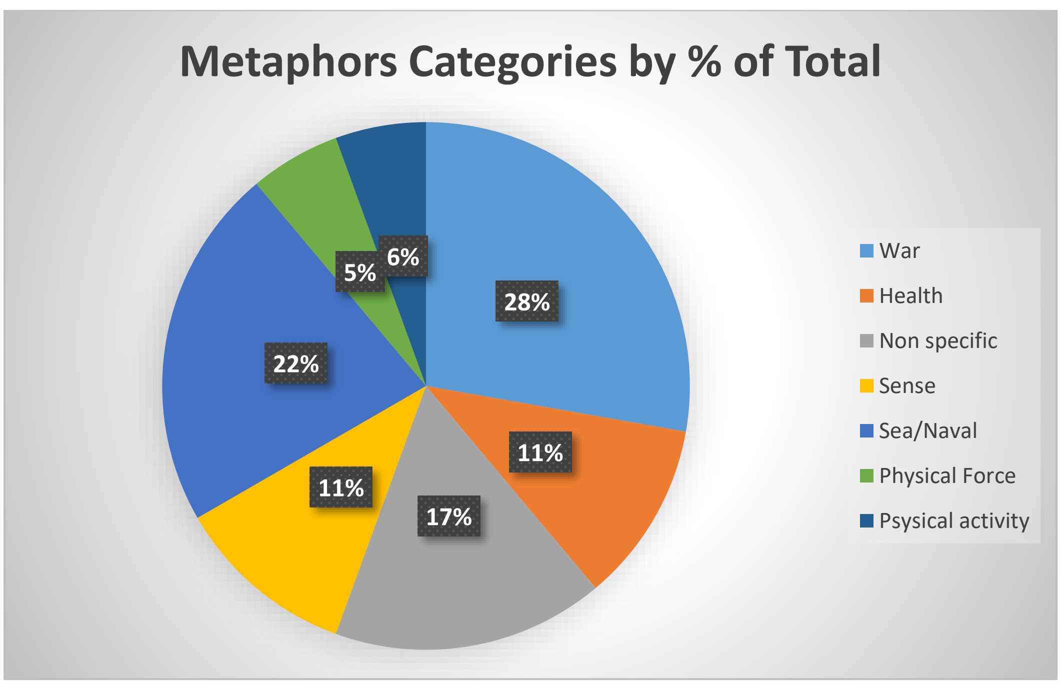
Non-Specific

Figure 1 Distribution of metaphors over source domain,1997



Source: author's database

Figure 2 Distribution of metaphors over source domain, 2015



Source: author's database

From these tables and figures, we can already draw some conclusions.

First, the source domains that the newspaper used are the same for both 1997 and 2015 database, which means that journalists tend to borrow from the same domain regardless the specific situation of the market. Of course, although the sources are the same, the frequencies are different. Expected was also the difference between the top3 domains used during those years; as can be seen from Table3, the sources used for 1997 are completely different from those used in 2015, showing that even if the main categories are always the same somehow the current situation of the market has an influence on the images chosen by the newspapers.

In 1997 metaphors are mostly referred to nature (mainly natural disasters), physical force and power and physical activity (including motion). This is not surprising, as 1997 has been a period of deep crises that starting from Asian markets, rapidly and unexpectedly affected major markets all over the world causing deep declines and losses.

The results obtained in 2015 might be quite surprising, but the reader has to keep in mind that, even if the year is considered as a stable one, the Italian economy was still facing issues coming from the crises of 2008. After the years of the economic crunch, the main key challenges for Italy in that period were related to reforms to make economy more productive and competitive, in order to raise the living standards and well-being of Italians. Moreover, there were structural weaknesses in specific areas, competition and regulation. The Italian government was focused on reverse the decline in productivity and put the economy on a path of steady growth. GDP had not grown much since 90s and not at all since 2011. Particularly the industrial production suffered in the recession more than many other countries. Bank lending had fallen, confidence in business was extremely low and the investments had fallen to an insufficient level. This stagnation badly affected Italians in many dimensions, from education to earning, from jobs to housing.

Before launching a new set of effective programs and reforms, Italy needed to solve the problem of political instability and weak administrative capacity.

At the end of 2015, only a few of the expected programs had been launched and the GDP mildly increase at the end of the year.[14]

Keeping all these events in mind it is possible to understand why metaphors coming from war or naval topics were intensively used in new papers to describe an economy that was still struggling with the effects of years of inadequacy of institutions and the crises of 2008.

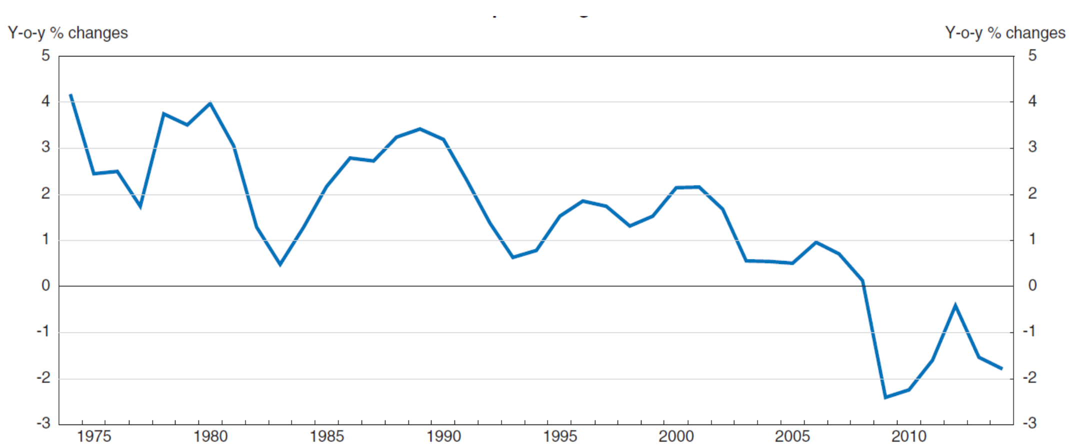


Figure 3. Per capita GDP growth. Source: OECD Economic Italian Surveys

If we make a comparison with the works from Boggio et al and Prast *et al*, we can see that there is kind of consistency in the results.

Focusing on the methodology, all three papers follow a similar way of analysing the data. First, the period taken into account, from the 24th of October to the 2nd of November is the same ten-day period used in Prast *et al*, to allow an easier comparison of the findings. The 1997 period in addition, coincides with the period

[14] OECD Economic Surveys ITALY, 2015.

chosen by Charteris-Black and Ennis in 2001. Focusing on the source domains, there is coincidence with the findings of previous works. Both this worsk and Prast *et al* include in their domains the *Nature* category, which is mainly composed by metaphors related to natural disasters to describe market changes in stock prices; on the contrary, we do not have any results for farming metaphors, which has instead been found in both Prast and Boggio's works. Moreover, we rank *Health* as a separate category, as in Boggio *et al* (2014), while in Prast *et al* this category is included in a more general *Person*.

Focusing on the choice of the database, our work is based on articles posted by national newspaper, in line with the databases chosen by Prast et al. However, there is notable discrepancy between the final numbers of articles that have been found in the two works. On the contrary, Boggio et all focuses on articles posted in websites dedicate to beginning retail investors and this difference in the choice of data may explain while the category of *Nature* has not been found in his work, as sudden changes in stock prices are described to investors. The formers describe movements in stock market, while the latter explains the key concepts of investing to people who already have an interest in becoming investors.

Talking about the results, in our work we show that there is a difference in the most frequent categories between 1997 and 2015 (Nature, Physical Force and Physical activity for 1997; War and Naval in 2015). On the contrary, Prast et all shows that the categories that have been used with the higher frequency are the same in both years (Physical activity, War and Game for both 1997 and 2015 plus Nature for the latter year).

Chapter 4: Gender: Masculine metaphors vs feminine metaphors.

This work is an attempt to answer to two research questions. On one side, we are interested in discovering whether the metaphors used by LaStampa comes from a limited number of source domains and if these sources vary depending on the financial and economic situation of the markets. On the other end, we want to understand if these metaphors and the source domains from where they are borrowed are mainly masculine or not.

This analysis is important because, in line with linguistics and with Boggio et all and Prast et all, we expect that masculine source domains may have a different impact depending on the gender of the reader.

In this case the main difficulty was to understand how to categorize metaphors in two dimensions: masculine and feminine. How can be masculinity defined? A common definition is that with this term we indicate all the qualities or attributes typically thought to be suitable characteristics of men (muscled, strong). On the opposite side, femininity is described as all the characteristics that we typically associate to women (romantic and protective). Thinking at these two definitions, it is obvious that masculinity does not mean automatically male.

Other researchers have already worked on this topic, providing us with a method to distinguish between masculine metaphors and feminine ones. The first paper that gave the start to this new stream of literature is the one from Boggio et all, who in 2014 suggested that the source domain was not the only aspect that needed to be taken into consideration in order to understand the influence that a specific language has on behaviours. As already pointed out, the imagery that a metaphor creates on one person varies from the effect that the same has on another individual, depending on experiences, feelings and preferences. Boggio investigated whether this difference in reactions may be exacerbated by the gender of individuals. In his paper, Boggio uses the Bem-Sex Role Inventory (1974) to identify masculine metaphors.

The Bem Sex Role Inventory was developed in 1971 by Dr. Sandra Lipsitz Bem and it is basically questionnaire that tries to assess your personality in terms of masculine, feminine, androgynous and undifferentiated and the method is based on a number of gender stereotypes. The test is composed by 60 traits of personality and individuals rate themselves based in a Liker scale from 1 to 7.

In the field of psychology, many researches are conducted involving the perception that individuals have on gender roles. A gender role may be defined as the expectations about what is an appropriate behaviour for each sex[15].

The method is based on stereotypes and assumptions for which men on a financial market are expected to be competitive, willing to bear risk, aggressive an analytical. On the contrary, assumptions for women states that they are expected to be caring, understanding and moody. When the test was first implemented at Stanford University, researchers noticed that some individuals were either masculine or feminine. In addition, some students had a balanced level of traits from both the two gender's characteristics. In this case, those individuals were described as androgynous, whose original definition states that androgynous persons possess equal levels of masculinity and femininity.

Although the BEM has been accepted as the standard method to evaluate gender personality instruments, many are the criticisms that other researchers have moved against it. The most famous one refers to the fact that terms such as masculinity and femininity are inappropriate, as they involve much more complex concepts and components that cannot be measured by the BEM.

This method is considered valid also today, as many studies revealed that there are specific traits and behaviours which are still considered as typical for men and others for women.

The categorization in femininity and masculinity of many aspects of our lives and society is indeed strong in current days and judgements based on stereotypes are more frequent than people usually think. It is sufficient to think about how people

[15] Cheryl L. Holt; Jon. B. Ellis (1998-12-01). "Assessing the Current Validity of the Bem Sex-Role Inventory". Sex Roles. 39: 929–941.

judge woman who may not want to have children, who pursue career and show a strong and independent character. At the same time, men that have a strong attitude for caring and dislike activities that involve competition and strengths may be object of uncomfortable questions by people around them.

Moreover, it is still strong the habit of considering toys for boys as girls as two completely different things. On one side, we have cars and constructions, symbol of competition and strength that are considered most of the time as toys for boys. On the other side, we have doll and kitchens that remind to the concepts of caring and kindness, which are therefore associated to girls.

These discrepancies are reflected on a more serious level also in other aspects of the everyday life. If we looked at the statistics of recent years, Italy was ranked among the European countries with the lowest gender equality level (according to what is established by the European Gender Equality Index). In the past years, policies to re-address the unbalance have been cautious and the reforms in the legal framework have been mainly promoted by European Directives or by the pressure of society. Strong differences can be seen in the rate of employment/unemployment, in the gap in earnings and in the involvement of women in decision-making processes. Moreover, even if the number of high-educated woman in Italy is quite satisfactory, just a few of them come from faculties such as those of Science, Engineering and Mathematics, as they are mostly considered male-studies. In order to re-address the stereotypes existing in the educational system and in order to fight the under-representation of girls' students in those universities, the Italian Ministry of Education, University and Research, together with the Italian department for equal opportunities, programmed the "The Stem month", a number of dedicated activities to combat gender stereotypes and discrimination in education[16].

Divergence in the numbers can be observed even in financial activities, as the number of man actively involved in financial activities is higher than the number of women. In this case, we are interested in finding if even in the financial reporting

[16] "2017 report on equality between women and men in EU'", European Commission, 2017.

and economic articles, journalists are giving more attention to men, using expression and metaphors which remind to typical masculine images or if the number of masculine and feminine metaphors are balanced.

In our work, according to what we have said in the previous pages on masculinity, expectations and stereotypes, we decided to take into account the categories that we found in the previous chapter and to divide them in masculine and feminine on the base of our own stereotypes. Therefore, to answer to our second question, we will consider PHYSICAL FORCE, PHYSICAL ACTIVITY, NAVAL and WAR as masculine source domains.

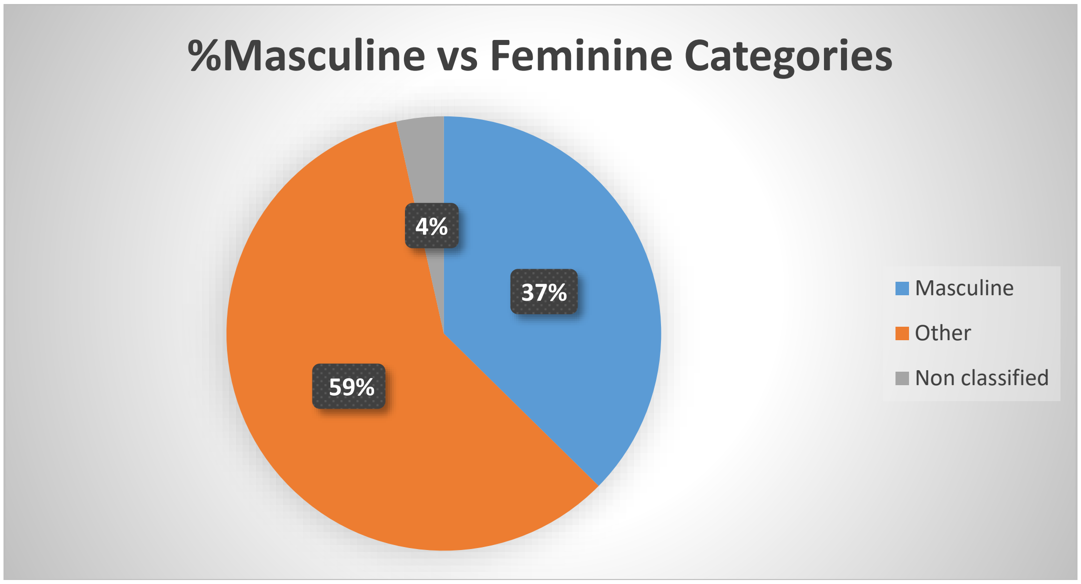
The table below shows the number of masculine metaphors in the newspapers for both 1997 and 2015.

Table 4. Masculine metaphors in LaStampa for years 1997 and 2015

Masculine Categories Composition	**1997**	**2015**
physical force	64	1
physical activity	41	1
war	9	5
naval	3	4
Total	**117**	**11**
Grand Total*	**313**	**18**
%Masculine Met.	**37%**	**56%**

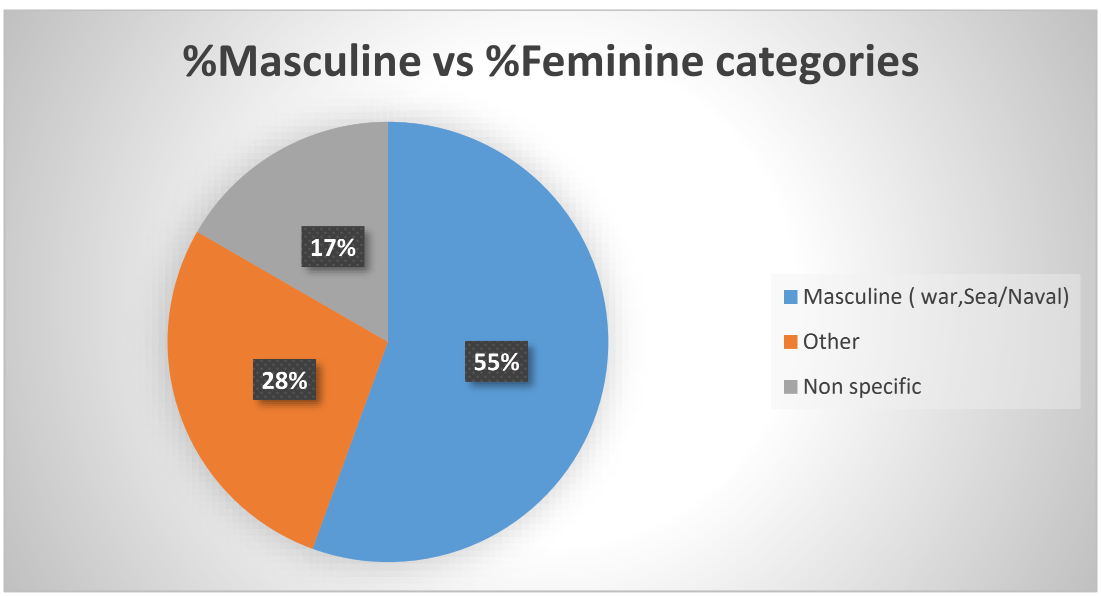
*all metaphors, including those that do not come from masculine source domains

Figure3. Masculine and Feminine metaphors in 1997



Source: author's database

Figure4. Masculine and Feminine metaphors in 2015



Source: author's database

As can be seen from the table and the figures that we presented in the previous page, there is no superior presence of metaphors from masculine source domains compared to feminine metaphors.

Especially in the articles from 1997 the total portion of masculine metaphors over the gran total is equal to the 37%, against a 59% of feminine categories and a 4% that we classified as Non-Specific[17].

Less marked is instead the difference between masculine and feminine categories in 2015. According to our findings, the 55% of the metaphors contained in the articles that we examined come from masculine source domain, against a 28% of feminine metaphors and a 17%Nonspecific. These results are not exactly in line with the expectation that the author had in approaching for the first time this kind of study, as a bigger discrepancy between masculine and feminine categories was expected in both 1997 and 2015. Particularly interesting is the fact that the proportion of masculine metaphors is higher in the period of relative stability compared to the period of crises that the economy lived in 1997, but what we do have to keep in mind in this specific case is that, as already highlighted, the total number of articles and metaphors that we found for 1997 is higher than the number that we have for 2015, at least in our database.

[17] The Nonspecific category has been used in this paper to identify those metaphors for which it was not possible to identify a specific source domain. An example of nonspecific metaphors may be the famous “put all our money in one basket”.

Chapter 5. Discussion

We found that the majority of metaphors contained in our two databases come from a limited number of source domains and are more or less similar to those that have been found in previous researches that we discussed in Chapter 3.

Moreover, the sources are similar for both years (1997 and 2015), showing that the choice of the domain from which metaphors are borrowed is not particularly influenced by the different period that the economy was living. What appears to be different is the intensity and the imagery that they cause in the mind of the reader.

Let us take as example the domain of WAR. In 1997, the metaphors that are borrowed from this source domain, evoke ferocious and bloody events and situations. For example, we found expression like *"bagno di sangue"* which in Italian is used to refer to a massacre and *"una settimana di sangue"* (a week of blood), that indicates a week of suffering and violence.

These kind of expressions, that evoke a strong concept from a psychological point of view, are not so frequent in 2015.

We can then conclude that there is some kind of consistency in the choice of source domains made by LaStampa across the years: the number of source domains is indeed limited while the specific metaphors and the size of their impact and intensity is different.

Moreover, in a period of crises, the newspaper used mostly source domains such as nature, motion and physical force while in period of relative stability the more frequent metaphors come from war and sea (including naval activities).

In the Appendix, it is possible to find the complete list of metaphors that have been examined with their meaning and their frequency.

Focusing on the second research question, we found that the masculine domains are more frequent than the feminine and nonspecific ones only in 2015, while in 1997 the percentage of masculine metaphors reached only a level of 37%. These results are not perfectly in line with the findings of former studies, such as the research from Boggio et all or the one carried out by H. Prast (2016), where the proportion of masculine categories is higher than what the author got in this paper.

It is also true that we are considering only a limited number of days to carry out our research, which means that maybe, over a larger sample of articles, the percentage may be different and perfectly in line with those from the studies we quoted above. We can then conclude that our work is still supporting the theory that masculine metaphors are more frequent than feminine metaphors in articles, but more deep studies are required in order to give a final answer to our question.

From other studies, we know that masculine imagery is dominant in both financial and general newspapers and in both period of crises and stability. In our specific case, it is not possible to make a real comparison and test this statement as our database of study is based only on a general newspaper.

These kind of studies and findings are in current days object of huge interests by a large part of economists and researchers. These results can indeed lead to new branch of studies and findings, ending with completely new theories and models which might help explaining not only why actual behaviors are different from those suggested by models, but even how context, experiences and stereotypes materially affect them and the magnitude of this impact.

More and more studies are now focused on how people actively make choices. it is widely recognized that persons do not make decisions based exclusively on rationality, but they based their reasoning on personal experiences, friend's opinions and information that attract their attention. It is clear therefore that the process of arriving to a final decision is driven by external factors and the reasons why it is important for economists, psychologists and managers to identify them are numerous.

Studies of this type will of course need new and more updated tools of analysis, which will allow us to test people behavior, willingness to take risk and attitude toward the financial field with a limited risk of incurring into biases and errors.

As pointed out, this is the kind of study that always requires the application of both quantitative and qualitative analysis. While for quantitative methods there are a lot of tools, software and programs which can be easily relieved, a qualitative analysis always involved a component of human discretionary. This factor is the one that may lead to difference in results and categorization, as it is not possible to pretend from different people with different background and sensitivity to be completely impartial when judging the results of the analysis.

In our case, a deeper look into metaphors, their gender and the way they are used may help researchers understanding how they can influence the attitude of people towards finance.

Chapter 6. Conclusion and summary

This paper is driven by the intention of analyzing the language used in the financial market reporting. To do it, we analyze two different databases provided by LaStampa. One database contained the articles written in 1997 over a period of 10 days while the other one was composed by articles published during the same window of time but in 2015.

From our analysis, we found that the metaphors come from a limited number of sources domains which are equal across time of stability and time of crises. This is in line with the conceptual metaphor theory and other former studies, which state that metaphors are not randomly borrowed by an unlimited number of source domains.

Moreover, after having categorized our metaphors, we distinguish them in masculine and feminine categories. In this case our approach was based on the BEM method and on the stereotypes that general population have when talking about characteristics of men and women. That is why we identified as masculine all the categories which reminded to concepts of strength, violence, force and power. We finally found that the use of metaphors that lead to a masculine imagery is quite widespread over the two periods taken into account. However, there is no strong evidence that suggests that masculine categories are used much more than the feminine ones, as instead it has been found in previous works.

This is still in line with all those studies who assess that finance and the stock market mainly represent masculine activities and it may help to understand why the number of men who are actively involved on the stock market is higher than the proportion of women. Moreover, in case of significant divergence between the proportion of masculine and feminine metaphors, it may represent a possible explanation for the excess trading performed by men on financial markets.

We suggest therefore to carry out more studies on this field, in order to identify with precision how strong is the impact that language has on people's behavior, affection and imagery.

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Appendix

Metaphors and categories in 1997

Category	Metaphor	Meaning	Frequency
Health/wellbeing	perdere la testa	lose control of the situation	11
Health/wellbeing	il Giappone trema	Japan is trembling	3
Health/wellbeing	un evento salutare	a good event for the health of the economy	1
Health/wellbeing	il bubbone che sta esplodendo	the problem is going to spread	1
Health/wellbeing	un colpo di tosse a Bangkok	first signs of an unhealthy situation	1
Health/wellbeing	la febbre asiatica é una brutta malattia	The Asian economy is described as a bad Asian fever	11
Health/wellbeing	follia che si é impadronita della Borsa	the condition of being mentally deranged	5
		Tot	**33**

Category	Metaphor	Meaning	Frequency
Sense	l'Oriente incerto	the financial situation in Asia is uncertain	1
Sense	vede rosa	see in a positive way	1
Sense	il giorno più nero	a bad day (described as a black day)	29
Sense	cedimento dei mercati	The condition or fact of being insufficient or falling short	8
		Tot	**39**

Category	Metaphor	Meaning	Frequency
Nature	Acqua passata	there has been a lot of water under the bridge	2
Nature	riportare nella tempesta	financial crises	10
Nature	tigri asiatiche	Asian tigers , used to indicate the Asians	44
Nature	tifone di Hong kong	tropical and violent storm	14
Nature	ondate di panico	A severe disruption, disturbance, or reaction	24
Nature	miliardi bruciati	To be damaged, injured, or destroyed by fire	9
Nature	l'intero universo di azioni	All space-time, matter, and energy,	1
Nature	pochi vendono per paura di altri terremoti	trembling of the Earth	1
Nature	l'uragano Hong Kong	a severe and destructive storm	8
		Tot	**113**

Category	Metaphor	Meaning	Frequency
Psychal activity (motion)	tonfo	The market went down	6
Psychal activity (motion)	giorni di montagne russe	the situation is unpredictable (described as rollercoaster)	5
Psychal activity (motion)	grave caduta della borsa	precipitous and rapid decline	25
Psychal activity (motion)	si va in picchiata e poi si vola	Unexpected decline	5
		Tot	**41**

Category	Metaphor	Meaning	Frequency
Sea/Naval	mutamento di rotta	change of directions and intentions	2
Sea/Naval	affondano I mercati	go down below the surface of something, especially of a liquid	1
		Tot	**3**

Category	Metaphor	Meaning	Frequency
war	una settimana di lacrime e sangue	a week of tears and blood	4
war	bagno di sangue	Savage, indiscriminate killing; a massacre	4
war	le tigri non saranno abbattute in modo durevole dal tifone	The tigers won't be slaughtered	1
		Tot	**9**

Category	Metaphor	Meaning	Frequency
Non specific	Composizione del paniere	composition of my portfolio	8
Non specific	tenere le azioni chiuse in cassaforte	keep somenthing safe	2
Non specific	le ansie del dragone	Asian people	1
		Tot	**11**

Category	Metaphor	Meaning	Frequency
Physical Force	sfracelli della vigilia	smashed to pieces	1
Physical Force	il crollo a Wall street	To fall down or inward suddenly; cave in.	63
		Tot	**64**

Metaphors and categories 2015

Category	Metaphor	Meaning	Frequency
Health/Weelbeing	Un nuovo mal di testa per il mercato	a new headache for the market	1
Health/Weelbeing	limitare a piccole dosi l'investimento	small doses	1
		Tot	**2**

Category	Metaphor	Meaning	Frequency
Physical Force	il titolo ha reagito con un crollo	the stock recated with a collapse	1
		Tot	**1**

Category	Metaphor	Meaning	Frequency
Non specific	castello di derivati	Castle of derivatives	2
Non specific	I mercati hanno festeggiato con I fuochi d'artificio	to celebrate with fireworks	1
		Tot	**3**

Category	Metaphor	Meaning	Frequency
Physical activity(motion)	azioni con il turbo	stocks with a turbo	1
		Tot	**1**

Category	Metaphor	Meaning	Freque ncy
Sea/Naval	la prossima ondata di fusioni e acquisizioni	next wave of mergers and acquisitions	1
Sea/Naval	Il gruppo Ibl sbarchera in borsa	the Ibl group will land at the stock market	1
Sea/Naval	categoria di strumenti d'investimento comuni pensata per navigare in questa particolare fase di mercato	particular category of tools realized to sail into this phase of the market	1
Sea/Naval	I numeri dello sbarco in Borsa di Poste italiane	the numbers of the landing of Poste Italiane at the stock market	1
		Tot	**4**

Category	Metaphor	Meaning	Frequency
Sense	azioni a rischio panico	panic risk	1
Sense	ottobre ha riportato il sorriso	bringing back the smile	1
		Tot	**2**

Category	**Metaphor**	**Meaning**	**Frequency**
War	Niel ha fatto irruzione in Telecom	to raid	1
War	il raid di Niel	raid	1
War	le uniche armi a nostra disposizione	our only weapons	1
War	La Cina imbraccia il bazooka per rilanciare l'economia	China takes up the bazooka to relaunch the economy	2
		Tot	**5**