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Disinformation Era in the Information Age; Is It the Reason for Global Crises?

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Abstract:

Information theory claims that information has a value: producing and acquiring information costs. Utilization of the information varies according to capabilities of the users, so information became an important factor in competition especially in the financial sector. Health and the usefulness of the information are as important as its costs and utilization rates, even more important. Disinformation (deliberately disseminating false information) is reduces the market efficiency seriously.

This study investigates certain disinformation activities materialized within the last decades for example: lucid cases from accounting scandals and insider trading activities which are mostly related with disinformation. Similarly, today's currency market conditions have critical question marks about the valuation of certain currencies, especially the value of US dollar. For instance, some of the currencies' market values strongly contradicts with certain theories such as purchasing power parity, international fisher effect etc. It is believed that these abnormalities in valuation reveals from false or misinterpreted information such as inflation numbers etc.

Study suggest that one of the main source of recent crisis is the disinformation all along the financial market place and will continue (step by step) until serious changes takes place in the nature of flow of information which limits or blocks the disinformation activities.

Keywords: Disinformation, accounting scandals, global crises, currency valuation

1. Introduction

All through the history, mankind had or tried to have certain competitive advantages while struggling to survive. These competitive advantages eased or affected their lives radically, for this reason historians classified certain time periods that are usually named with the factors which are provided certain competitive advantages. For example, during the Stone Age, having and efficient usage of stone provided certain advantages against to rivals and this period of time is called Stone Age. Having and efficient usage of bronze granted with a superior positioning in the Bronze Age. Similarly, during the industrial age industrial capabilities provided advantages to the people who have them; and this time period is called Industrial Age.

Existing time period is called "Information Age", because this period's main competitive advantage is information. In this age; the people who have enough, reliable, useful information, and who can use them efficiently can easily gain competitive advantage against to his/her rivals. In manufacturing sector, having scientific information or knowledge provides many opportunities to develop new goods and services or production methods.

In the service sector, having useful information would lead the entrepreneurs to set up efficient distribution channels and competitive services etc.

Furthermore, information plays much more important roles within the financial sector; credit estimates relies on information, valuation of firms relies on information, performance measurements relies on information, analyzing of markets again relies on accurate and reliable and useful information for decision makers. Efficient market theory claims that reliable, accurate and useful information should be provided to all users in the same time. Hence buyers and sellers can get useful and reliable information for their analyses to determine the firm prices. Any deficiency in generating information and analyzing of information could harm the market efficiency, could result with misevaluation.

But the dilemma is that: with the information age information became a competitive advantage but efforts to establish efficient markets reduced the importance of information because everyone could easily acquire information. If everyone can get the same information (competitive advantage), it is not competitive advantage. So; is this period information age or not? If everyone gets the same information and if it is not a competitive advantage under the (comparatively) efficient market theory, how can actors in the market can get a competitive advantage? There can be several (topical) answers for this question but one will just concentrate on certain topics related to disinformation. First (immoral) choice would be misleading the markets by producing false information or by hiding or camouflaging correct information. Second one would be getting information earlier which is called insider trading.

Accounting scandals and several other incidences: insider trading activities proved that these immoral activities became some kind of competitive advantage in business environment.

In all markets, there are certain amount of information related deficiencies, these deficiencies can be acceptable up to a level and it just harms certain amount of market actors. But if the disinformation activities or deficiencies widens and markets starts to take wrong decisions based on disinformation activities or false information, it results with firstly with overvalued stock prices or currencies and then the crises, such as global, Argentinian, British crises, accounting scandals and credit crunches.

2. Quality of Information

There are several definitions for information but our definition is "accurate data which is suitable to make decisions". Information plays a curtail role in the marketplace; buyers', sellers', analysts', watchdogs' appraisals mostly based on information gathered or generated by accountants, economists or statisticians etc. Enormous amount information flows into the market place and market(s) analyze this information. These analyses result with several decisions: certain values for certain assets buy hold sell etc. Certainly, processing that much of information creates some confusion and there should be certain amount of inaccuracy in decision making process or in producing information. In the free market economy, these people who made the mistake has to bear with it (i.e. losing money); amateurs. But, if the whole market (professionals like financial media, analysts, investors and governments) makes mistakes it is usually result with crises. In crises, everyone especially the parties who has not been participated to such activities might be wounded.

Basic components of the information models are; information source(s), communication channel(s) and beneficiaries. In the marketplace information is mainly generated by the accounting information systems, additionally statisticians and governmental bodies and several other bodies even gossiping networks provide or generate information.

Most common communication channels are financial media; financial papers, TVs etc., in addition to financial media market analysts, investment clubs, banks etc., works as communication channels which transfers the information generated by the information sources mostly with their own interpretations and comments. Misinterpreted or mislead comments of the communication channels can seriously defect the health of information even if there is no defect in the source of information.

Beneficiaries of the information are, the institutions or the people who use this information to take decisions, small investors, institutional investors, rival firms, government or ordinary citizens. Health of the beneficiaries' decisions depends on the health of the information provided to them and their ability to analyze the given information.

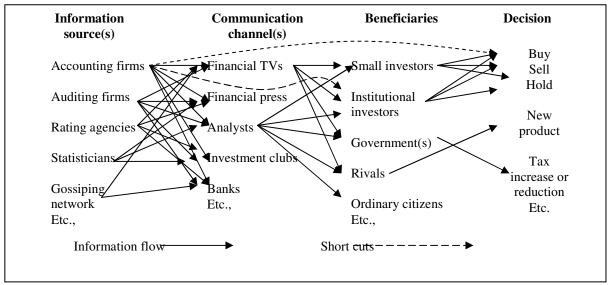


Figure 1: Exhibition of a sample Information Model for Financial Markets

Figure 1 exhibits the complexity of information flow in the financial markets. There are many information sources should be analyzed as well as various routes for information flow for the end users. Some of the end users prefer to use shortcuts for example; governments may prefer to use the information directly from the accountants. Health of routes influence the quality of information. In this complex information highways, making sure of having correct and useful is almost impossible, and it is easier to manipulate the information.

Gackowski (2006) classified the sources of information under two headings; active information sources and passive information sources. Active information sources target the end users to act in a desired manner, for example rating agencies' ratings desires direct action; buy, hold or sell. On the other hand, passive information sources provide comparatively raw information that are measured or observed after certain processes, which are usually needs further corrections, remarks and interpretations, like balance sheets, profit loss accounts etc.

Quality of the information is related with its correctness. If the information is purely correct it has a value for the decision makers. But measuring the correctness or the quality of information is a difficult task, especially in very complex mechanisms such as; in the financial market places.

When there are no certainty probabilities are used to measure the correctness or the quality of information.

Gackowski (2005) states that qualified information should be operationally usable and useful. Operationally usable information is the information that can be interpreted by the user, should be significant to the decision makers for decision and should provide in time. Operationally useful information is the information that is useful for the specific operation. For example; an information, about the house prices, may not be useful for the ceramic manufacturing decisions, so the information is not useful for the ceramic manufacturers.

Subsequently, the quality of information is based on three factors; correctness, usability and usefulness of information. But in the financial markets, where there are millions of information flows within the communication channels, it is very difficult to determine the degree of information quality which directly affects the market efficiency.

3. Disinformation

Disinformation activities existed all through the history. In the ancient times mankind dis-informed the prey by changing certain environmental indicators so that the prey to take wrong decisions, hence they could be able to hunt the prey easily. Commanders of the armies dis-informed the enemy by creating artificial ambiance to mislead to beat them. Especially during the world war two and the cold war (Kirkwood, 1986)the importance of the intelligence activities: collecting correct information and dis-informing the rival parties, became more important.

Even in the nature many creatures hunt their prey by disinformation: changing its color, environment or attitude etc.: the disinformation activities are widely used in the nature by several creatures. So, the disinformation activities are the activities purposely planned and executed activities for misleading the enemy or the rival to beat them. At the end of the act, one party losses (life, money or benefits) and the other party won. This explanation clearly indicates that "disinformation is very much similar to organized crime". Misinformation is can be defined as unintentionally, mistakenly providing false information to the other parties. Fetzer (2003) indicates the disinformation is the act of distribution or broadcasting of false, mistaken or misleading information in an intentional, deliberate and purposeful effort to mislead, deceive or confuse the other (rival) parties. Disinformation requires careful planning and organizing of the realities in such way to hide or overshadow the real situation. Disinformation activity is a very costly activity (money and time), so there must be very serious interests behind these activities.

Fetzer (2004) classified five types of disinformation activities in relation to JFK assassination. Obviously, there can be different types of classifications in according to the academicians' perspectives. This study classifies disinformation activities in terms of financial sectors.

3.1. Type 1: Subconscious Disinformation

It is preferred to call this type of information as "unconscious" disinformation. In unconscious disinformation, the person or institution who are acknowledged about certain evidences, does not have any chance or ability to assess the degree of credibility of information but the parallel evidences support the evidence in the direction of his own interest. And, the acknowledged party ignores certain information which can reduce the credibility of information and reflects it to other parties. Here even though certain amount of information is correct there are inconsistencies (disinformation) in the whole content but the mind subconsciously ignores them. Additionally, certain beliefs, 'like too big to fail', subconsciously restricts decision makers', especially small investors, urges for inspections for the whole truth. Even the professional's large investment companies and governments could ignore the whole truths, mainly risks, as is happened as is happened in the collapse of Enron and Lehman brothers.

Sometimes certain incorrect information, which is considered as unimportant, stiffens in the mind as hundred percent correct information and the person unconsciously and subconsciously distributes the false information (disinformation) as an absolute truth to the other people. Since incorrect information matches with the person's own interest unconsciously he accepts it as absolute truth and unconsciously dis-informs the other parties unconsciously.

In the market place brokers' and analysts' incomes or interests are allied with the amount of sales. So, when they try to sell certain stocks or bonds consciously or unconsciously by neglecting certain information; bad indicators, numbers etc....

3.2. Type 2: Systematic Distortion of Truths

In a very complex decision environment, every detail has importance. Sometimes ignorance of a small detail might cost a lot; as happened in challenger disaster decision makers ignored changes in weather temperature and small amount of frosts on the fuel tank, the result is disaster. In the systematic distortion, distorting party provides enormous amount of false or distractive information to confuse the decision maker's (victim's) mind. This distorting information weakens the importance main decision criterions; camouflage and/or distorts the credibility of information and distorts the decision-making mechanism. After confusing the mind of the victim, perpetrator can reshape the logical explanation of the evidence, can reshape decision making mechanism and change the criterions in according to perpetrators' own interest.

Sample for distortion of truths: an instigator, who should investigate the discrimination case for promotion of employees, is asking questions during the interview like: "how do you asses your term during the management?", "how could you able to manage the organization so well?" "How many chair, desk, and blackboard you have?" which are disturbing and distorting questions. Obviously,

investigator is avoiding to ask appropriate questions (which might enlighten the discrimination case) and is trying to distort and camouflage the truths with less related (distorted) questions.

3.2.1. The More Appropriate Questions should be

"what were the main criterions during promotion decision" "are these performance criterions appropriate" "why you did not promote the highly-experienced person?" "Why did you not promote the person who has the highest contributions, all through the establishment of the department?" "Why did you promote the person who has a rival company against to the organization: is it ethical" "why did you promote the person as a manager who even cannot manage his own business?"

Answers for distorting body can be unrelated (with the real subject discrimination) let's say "during my management trees have been planted, slots have been constructed for birds." Or it can be false or less credible information "he (favored manager) is a rich man, rich people knows how to manage people fairly", "rich people can contribute to our school" no data! no credible information! only distracting or camouflaging the truths: disinformation.

Such attitudes from both sides can seriously mislead the direction of investigation from discrimination to plantation of the trees: deviation from the original purpose.

Systematic distortion of truths can take place almost in all kinds of social cases; in economics, political debates etc....

3.3. Type 3: Complete Rejection or Ignorance of Certain Aspects

In the decision environment, there are certain groups: media, political parties, religious cults etc., have strong power to influence the society especially their members. With this power, they can completely reject or ignore certain information. Because measuring the quality of information is very difficult to assess and generating fully credible information is practically impossible; any information can easily be criticized in terms of correctness, usability and usefulness. Therefore, these powerful influencing groups can easily impose their thoughts to the group members. In such groups, antagonistic ideas cannot be tolerated; the information or the idea served to them is an undisputable fact. One of the personal experience would be a good example for complete rejection; during the meeting one indicated there are certain risks should be considered and covered. The leader of the group clearly opposed to the suggestions and the other members has to support him and these risks completely ignored or rejected. The person has been called "paranoid" by the group members and excluded from the group. But, unfortunately mentioned risks become come true.

For instance: during the promotion decision rejection or ignorance of certain aspects like: The total contribution of employee over the years, experience, performance and quality employee can be a big discrepancy, on the basis of the idea "only the people who are belong to our (religious and economical) group can be a manager, the others cannot and they should be excluded and discriminated". So, complete rejection or ignorance of certain aspects and complete acceptance of beliefs can mislead the decision makers and innocent victims.

3.4. Type 4: Distracting the Attention by Foisting Unrelated or un-credible Information

Decision makers (receivers of disinformation) usually collect several kinds of information and analyze these groups of information. Adding extra information, which is unrelated and/or incorrect, might distract the decision makers' attention in the direction of disinforming party's benefits. Second hand automobile sellers' tactic would be an example for this kind of disinformation; when a buyer decides to buy a car from the other company, they usually interrupt the conversation and distract the buyer by saying "I have sold many cars with similar qualifications but the price was much lower than this. If you can wait for a while I can easily find another one for you". If the buyer buys the car from the other company, there is always a big doubt in his mind. But if he does not, this cheap car never comes. Here the credibility of information is unknown and is not possible to measure it.

Similarly, bombardment of unrelated information might confuse the receiver's mind and might result with a decision in the direction of disinformation party's benefits. Stretching certain subject and changing the focus is one of the frequently used tactics which is mostly used by the politicians. Politicians usually changes the subject with related or unrelated subjects when they do not want to or cannot answer to the question. If they can successfully distract the attention of the (information) receiver, they can successfully distinform them.

3.5. Type 5: Complete set up

In this kind of disinformation activity all circumstances fixed and controlled by the dis-informing party. This type of activity mostly applied by the organized groups; criminal organizations or secret services etc. For example: they establish an imaginary firm, fixing fake documents and transactions, profit loss accounts and balance sheets etc. These companies are used for several purposes; money laundering, cheating certain individuals or organizations, benefiting government's incentives etc. Setting up imaginary companies was fashion, in Turkey, to benefit from the government's export incentives in the past. Likewise, there was many setting ups during the accounting scandals occurred in the US.

4. Certain Aspects of Financial Disinformation Related to Global Crises

The period of time from 2002 to global crises could be named as "welfare period". During this time, everyone: governments, investors, entrepreneurs, and workers almost all parties won (win-win policy). In any game or business, there are always some winners as well as losers because there are always certain limitations. The bases of economics rely on this aspect: the effective usage of "limited" sources. Since everyone was winning, major institutions, governments even the academicians were reluctant to search the motives behind this prosperity. Even if there are some suspicious voices, there are called "paranoids" or "schizophrenics" and they are

ignored or discarded. But there were certain discrepancies, inconsistencies such as: the declared inflation rates were in consistent with the market indicators, the value of the currencies was not the reflection of basic economical rules.

Unlike the great depression, global crises widened all over the world. Because during the great depression some countries could be able to immunize or limit the economical syndrome by trade barriers. But current international trade conditions; with many bilateral and multilateral trade agreements, and world trade organizations terms and conditions does not let governments to immunize or limit the economical syndrome. Today there is less economic and trade barriers for protection. Additionally, US dollar is used as a fundamental currency in the international trade, which might have been widen the crises. So, the US dollar users in other countries are also affected from the crises which has started in the US. Two-third of the US dollar is consumed outside of the US.

4.1. Declared Inflation Rates

One of the best way for disinformation is the misusage of statistics. Statisticians use the numeric data for their analyses; their analyses contain certain mathematical applications and they just report the results. Statistical information is usually considered as a qualified and credible because it uses numbers, mathematical applications, a lot of diagrams, graphs etc. Beliefs like "numbers do not lie" (complete rejection or ignorance of certain aspects) strengthen its ground. Indeed, statistics provides several alternatives to the information producers. First set of alternatives occurs during the selection of inputs; every set of input might give different result. So, the information provider can change the set of input in according to his/her interest (systematic distortion of truth). For example, during the period 2002 and 2008 declared inflation rates were in between 2% and 5% in the US. But if one takes the commodity or property prices as a base for inflation, rates could be calculated much higher. So systematically distorted inflation rates might have been confused or mislead many decision makers. May be, that is why, professional companies and governments all get in to the trouble. Second set of alternatives occurs during choosing the statistical calculation method; different statically methods give different conclusions; even small changes in weights could change the results.

During these years' price of petrol is increased from 25\$ to 110\$ even 140\$, gold prices from 225\$ to 900\$, similar increases take place with a quite high volume almost in every commodity, likewise, food prices increased a lot. But the declared inflation rates were in between 2, 5% to 5%. The questions arise here "are these inflation rates credible?" or "are they product of systematic distortion of the truth?"

If the inflation numbers are the product of systematic distortion of the truth, it would have mis-lead several parties, such as; governments, firms, personal or institutional investors etc. Governments use this information as the basis for determining treasury bonds' interest rates and for several managerial decisions. Firms, especially multinational firms, uses this information for determining the product prices, evaluate the currency exchange rates and several managerial decisions. Investors' decisions rely on expected rate of return and inflation rate should be discounted from this rate to make more accurate decisions.

During this period, many of the countries declared comparatively quite low interest rates which were hardly matching with the actual price increases. Governments were happy with the numbers, and increased their popularity. Customers were happy with this artificial situation because their purchasing power increased with this numbers. Firms were happy because of increased sales. So, artificial numbers provide an artificial welfare to all parties and no body complained, except some academicians. Such distortions considered as "white leis" which makes everyone happy. But distortion of inflation rates, created several bobbles in the market. They carried on as much as they can but one point the bobbles has started to blow.

4.2. Transformation of "Risk free rate of return" to "Risk free rate of loss"

Risk free rate of return is the rate of return earned from a financial instrument which does not have any risk. Government bonds and treasury bills etc. are considered as risk free assets and their returns considered as risk free rate of return. That is why government bonds rates are called as risk free rate of return. Especially fed's declared rates are considered as credible information and a base for interest rate calculations. Because it is thought that central banks using their expertise and objectivity while calculating their rates.

In addition to central bank rates, LİBOR (London Interbank Offered Rate) rates are also considered as risk free rate of return. In the past; while determining the risk-free rate of interest, inflation rates used to be considered as a base (i.e. interest rate plus certain amount of real return). Hence investors used to receive real returns. Nevertheless, recent calculations do not reflect the real inflation rates.

Today, majority of the central banks implementing lower rates where there is a certain amount of inflation i.e. Investors savers will certainly loss. This policy can be called "risk free rate of loss policy". This policy guaranties the loss for the lenders. This policy can be considered as "complete rejection or ignorance of real return".

Any financial literature indicates that there should be a balance between the risk and income. This balance provides certain benefits to the parties; lenders (investors) could receive a decent "**real**" return in response to risks they are taking and borrowers (entrepreneurs) could have a chance use others' savings, when (or if) it is needed.

This environment prevented the lenders willingness to invest their money (loss is almost guaranteed), and inflamed the risk appetite of the borrowers incautiously. Since the money is others' money and cost of money is quite low they take the risks where ever they can. As a result of complete rejection or ignorance of certain financial rules, customs and unions, financial environment became a financial suicidal arena for the savers or investors.

After bad experiences investors take their lessons; don't lend or invest any money in this environment" and lost their confidence to the markets and its leading institutions. Liquidity shrank in the financial markets even though the central banks unrelentingly printed and injected money to the markets. There is still big discrepancies in between central bank policies and market realities.

4.3. Over- and under-valued currencies

International currency parity relations explained by several theories: purchasing power parity, interest rate parity, fisher effect theory, international fisher effect theory and forward rate parity. All these theories suggest that the value of a currency is related with certain indicators, such as; interest rates and inflation rates. Controversies about interest rates and inflation rates mentioned above, which are used as inputs for currency valuation. First of all: If the inputs are false, the results of the valuations would be wrong.

Secondly, most of the estimations relies on expectations of the analysts' which (sometimes) might be influenced by political attitudes or business relations. For example, accounting firm Arthur Anderson advised to buy and gave high ratings even on the date of bankruptcy for Enron. Similarly, three days before the bankruptcy government official declared that Lehman Brothers was not in trouble.

Furthermore, recent currency valuations strongly affected by psychological demand and supply. For example, when the investors felt there is a risk investors psychologically invested in US dollars, where dollars were the source of risk.

In addition to these, financial markets and the central banks completely ignored or rejected the Bretton Woods model which used to provide confidence to investors and traders. As we know one of the main reason or trigger of the global crises is the lack of confidence.

In this environment, certain currencies are overvalued in the financial markets which mislead or affected the trade balances, exporters (and importers), customer etc.

On the other hand, some countries are trying to undervalue their currencies so that they can have competitive advantage in international trade, for example some of Asian central banks purposely trying to keep their currencies' values down; like Chinese and Japanese central banks. For instance, Demirhan and Demirhan (2015) claimed that exchange-rate volatility has impact on international trade by affecting exports and imports.

Irregularities in valuation (it does not matter if it is the result of disinformation or misinformation) create such an environment where the governments, firms and investors cannot take correct decisions on the bases of credible information (valuation).

Indeed, US government is also trying to reduce the value of US dollars for the similar reason: to get competitive advantage in the international trade. The dilemma for them is that the US dollar is widely used currency in the world; if they reduce the value of US dollars, the credibility of the currency will be ruined (this could create serious problems in the US treasury and in the international trade), on the other hand, if they increase the value of US dollars, the budget deficit will boost in the US. So, US government and the treasury stuck in the middle and have not decided what policy to follow.

4.4. Loopholes in the WTO Agreement: Lack of basis for Common Monetary Policies

World trade organization is an institution designed to control and liberalize international trade. WTO deals with the rules of international trade and operates as a de facto international organization. With 153 member's country, it covers 95% of the world trade and implements the conference's policies (Fergusson, 2007). WTO regulates certain subjects such as goods and investments, services (the general agreement on trade in services), intellectual property rights, dispute settlements, technical barriers to trade and reviewing of governments' trade policies etc. WTO agreement mainly concentrates on the technical issues of international trade and neglects the monetary side of the international trade.

Globalization created such a liberal and free international trade environment which is technically regulated and controlled by the WTO (up a degree) but an environment which is not regulated and controlled monetarily. There are no uniform monetary rules and regulations accepted by the central banks and governments, which regulates monetary issues. Hence central banks and governments could be able to use these loopholes (monetary policies) as a financial weapon against rival trade parties. Some governments preferred to have undervalued currencies to get competitive advantage in the international trade. Some others preferred to keep up with overvalued currencies. To impose their policies (valuations) they intensely used disinformation tactics and some indicators such as; inflation rates, interest rates etc., as mentioned before.

WTO agreement and globalization obviously freed the international trade but lack of uniform regulations and enforcements in financial markets along with the trade freedom created such a chaotic trade environment where some companies, central banks and even the governments prefer to implement guerilla tactics in international trade and majority of them became successful. For example, companies used more and more offshore trade which are mostly unregistered and defected the quality of information, or central banks preferred undervalued currencies and the governments ignored or supported such activities as long as it suits them.

4.5. Need for Setting up System of Rules to Regulate the International Monetary System

Every decision: investment, buying and selling decisions, require certain evaluations in terms of monetary units. If the value of the currency is inaccurate the remaining calculations and the analyses can be incorrect as well, consequently the majority of the decisions would be incorrect. If the majority of the decisions are incorrect, crisis is inevitable. Same as today, majority of the central banks undervalued their currencies to gain competitive advantage. Consequently, making comparisons and analysis on the basis of such information cannot be appropriate.

That is why; there is a strong need for setting up system of rules to regulate the international monetary system, which is unanimously accepted by the governments and by the central banks. Agreement has to contain binding rules and regulations related to monetary policies which confirm that; the information flows to the market is accurate, comparable and credible. As is in the Bretton Woods model; there could be obligations for each country to adapt a monetary policy that maintains the exchange rate of its currency within a fixed value (for instance in terms of gold or platinum etc.).

In this agreement, there could be other obligations; which confirms the accuracy and credibility of main indicators (inflation numbers etc.,), which strengthens the precautions against to black economy (seriously defects the health of information), which determines or limits the interest rates on basis of economical rules, and which ensures the risk-income balance exist in each country.

4.6. Accounting Professionals: Basic Source of (Dis) information?

Proposed international agreement would increase the quality of information up to a degree in international level. Besides, there are several measures to be considered in the domestic level as well. One of the main sources of information is the accountants. Their attitudes, technical capabilities and ethical values affect the quality of information that flows into financial markets. Similarly, (internal, independent and governmental) auditors are also plays a crucial role in the quality of financial information; they are responsible of checking the correctness and the appropriateness of information generated. Accounting scandals undoubtedly approved that accounting information can be used for misleading stakeholders.

As a methodology, accounting provides information related to firms' financial situations. Accounting information affects the accounting information users'; firms 'owners/managers', investors', governments' decisions, which provide information about the companies' past and future strategies, management and even technological capabilities. Thus, the quality of accounting information directly affects the quality decisions.

There are several reasons why accounting bodies would try to misinform the users.

First, conflict of interest; accountants and auditors working for the firm, their fees or salaries paid by the firm. These fees and salaries are usually exaggerated to large quantities if the firm is a big company. For example, in the year 2001, Disney paid \$32 million to PricewaterhouseCoopers as consulting fee and \$8.7 million for auditing fee. Similarly; Enron paid \$25 million for auditing and \$27 million for consulting at the same time period (Tackett, 2004). Even though accountants are mainly responsible to their firms, they are also responsible to the government, the investors, and the banks etc. but they earn their money from their companies. If there is a conflict of interest between the firm and thirty parties, they have to take the firm's side.

Secondly, lack of ethical values Levitt (2002) stressed the importance of teaching ethical values in accounting education and focuses on five factors related to ethic: corporate transparency; corporate values and behavior; money culture; vices of a capitalistic society; the prevalence of a legalistic culture. Well-equipped technical knowledge is an advantage for an accountant but this should not be enough. Without ethical values, technical knowledge could be a disastrous weapon. Pitt (2004)suggests that without ethical values laws and regulations are useless, people will find ways around them.

Thirdly, loopholes in the GAAP (Generally Accepted Accounting Principles); accounting scandals approved that (internal, independent and governmental) auditors fail to detect illegal disinformation activities. There could be two reasons why they fail to detect these activities; (1) auditors' capabilities were not sufficient enough to detect disinformation activities which is less likely, because there were many companies successfully executed their disinformation activities and hundreds of auditors controlled their activities (all the auditors cannot be insufficient). Or (2) there were loopholes or deficiencies in the GAAP; that is why auditors fail to detect disinformation activities. As Purr (2004) mentions "accounting rules are too open to interpretation and abuse for companies' financial reports to be relied on by analysts and investors".

Failure of warning mechanisms: in the marketplace expected role of auditors' and the rating agencies' is to warn the market against to legal and economical misfits of the inspected or analyzed companies. During the accounting scandals, analysts were recommending "buying Enrol stock right up the day it filed for bankruptcy" (Williams, 2004). Similar evidences occurred during the global crisis as well; just before the American history's biggest bailout Freddie Mac and Fannie May announced that their finances sufficiently sound to withstand and U.S. secretary Henry Paulsen indicated that their bailouts are unlikely (Reuters, 2008). Many similar evidences could be listed; warning bodies and sometimes governmental bodies are failing to warn or are not warning the public and investors until the last moment, controversially they usually try to calm the situation by hiding or minimizing the facts to keep up with their client or to keep economic climate well. Whatever the reason, it can be classified as disinformation. Rating agencies and the analysts should warn the public against to the risks well before the collapses, but they usually don't. Again, the question is 'is it insufficiency or disinformation?

There could be several ways to cope with accounting professional's failures or disinformation activities. For example, more detailed financial and auditing reports; these reports usually consist of limited results and do not contain basic information, the methodology used, the risks the company facing with or the opportunities of the company etc.

Additionally, a system could be founded which guarantees the quality of information in exchange of fee paid by the clients (investors). With this guarantee mechanism, investors losses could be compensated, if there is a serious defect in the quality of information. Additionally, guaranteed financial papers would resolve the problems related to interest of conflict.

Systematically revising and adapting of the GAAP and IFRS, for all nations or globally according to changing conditions, is not only a necessity for preventing disinformation activities but it is also a necessity for harmonizing financial markets.

5. War of Interest Rates: Central Bank Rates versus Market Rates

Within the last decades under-valued currency policies became a weapon or tool against to rival companies or government. The simplest way to reduce a currency's value is to reduce interest rates. According to main currency theories (PPP fisher and fisher effect theory) there is a direct relation between the real interest rates and the value of the currency. If the real interest rate increase the value of the currency increases as well (or the other way around). Several studies investigated the validity of Fisher Hypothesis empirically (See. Demirhan, 2016).

Initially South Asian countries implemented low interest policies to increase their export. Later on, Japanese government applied no interest policy to stimulate their stagnant economy. Low or no interest policies were considerable successful for a while and stimulated the economies up to degree. When there is, a crisis using stimulators in the economy is normal same as in medicine. For example, in the medicine, when there is a critical situation (ex-heart attack) if a patient's heartbeats stop, electric shocks are used for stimulating and awakening the patient *for a short time* and with *a limited voltage*. In excessive usage of stimulator might completely destroy economical system. For example, in excessive usage of electric shocks might kill the patient. In excessive usage of low interest rate with under-valued currency policy (an extreme measure) like doping for a long time might destroy the economic system unbearably. Similarly, in excessive usage of high interest rate with under-valued currency policies (an extreme measure) for a long time might destroy the economy awfully.

Over the last decade, major economic powers: like Japan and US implemented and still implementing this extreme measure.

Today there is a big divergence of opinions about the interest rate and risk levels: Central banks and the borrowers claim that there are not many risks and there should be further interest rate cuts. On the other hand, lenders (savers) strongly oppose lower interest rates that could be interpreted as "guaranteed rate of loss". So, there is a big discrepancy (or war of interests) between them.

Strong public support or guidance for rate cuts creates a strong pressure on politicians and their employees: head of central banks. Public opinions are an important matter for politicians' inconsideration to democracy. But in democracy neglecting basic rules would cause disastrous results. For example, during the roman times slaves was fighting against to each other in arenas. In this game winner used ask to the public if he could kill the loser or not. If majority agree with him he used to kill the other fighter. But basic neglecting basic rules, human rights caused deaths: disasters.

Similar exercises take place in the financial and money markets: public investors and the financial media urging for further rate cuts, politicians and heads of central banks executes public urges the same demand without taking considering basic rules such as: PPP fisher effect and international fisher effect etc.

Investors and lenders who are investing their own money have already been lost a lot in this game and they are not willing to play this game with these rules (guarantied defeat or lose). But central banks are persistently trying to impose their interest rates to the markets and the conflicts of the interests clash in the market place: war of interest rates.

This situation creates several abnormalities in the marketplace: (1) while central banks printing and injecting money, markets suffers because of liquidity. (2) In spite of un-provisional printing of money, high deficits and loses, and higher risk; certain currencies' values are increasing.

6. Critiques on Rescue Plans

To cure any kind of illnesses, genuine diagnoses should be identified; the root of the problem, either it is medical or economical sickness. General thought is; this crisis occurred since the lack of liquidity and that is why it is called credit crunch. But several efforts by the governments and the central banks to boost liquidity could not prevent the horrific economic problems. One might suggest that pumping cash in to the market did not work in the past and may not work in the near future, because the main reason of the crises were increased disinformation activities and on this base badly managed companies. Underestimated risks; on the bases of doubtful interest, inflation and currency rates, lead the managers to take risks as much as they can (bobbles in the risk appetite). Lower interest rates encouraging managers to take more risk and badly manage the companies.

Governments provide the liquidity from the public sources. Saving badly managed companies by the public finance means rewarding the bad mangers and punishing the public. This is an unethical behavior and reduces the confidence.

Governments just concentrated on pumping liquidity to the markets and neglecting the regulatory exercises. Today's local financial markets became a global market where there is a need for new uniform rules and regulations for its efficiency accepted by the nations. Reducing interest rates seemed another solution by the central banks. But lower interest rates or as we call it guaranteed rate of loss increasing the tension and decreasing the confidence among the investors, instead of easing the tension.

Several governments prepared local rescue plans for the crisis based on interest cuts and liquidity injection. But the crisis is a global crisis, solutions have to be global, unique and coordinated. Besides, the amount supposed to be injected to the markets is huge but the required amount still much higher. If the markets feel that the injected money is not sufficient, confidence levels could reach to verge of collapse.

7. Anticipated Risk: Total Collapse of Currencies

In global financial markets US dollar is used widely for several purposes: saving, daily usage and investments. Supposedly two third of the currencies used in the global trade is the US dollars.

US budged deficit reached to record levels. US treasury injected huge amount of cash to the financial markets to cope with global crises. For the same reason, they are taking huge amount of toxic assets' responsibilities and issuing more treasury bonds to the markets. In addition to these, US treasury sold considerable amount of gold from their reserves and reduced the interest rates. Likewise, many of the major central banks and the governments have driven similar monetary policies. They reduced their reserves and assets and increased their responsibilities, debts, with interest rate cuts. But the value of the currencies is not declining as much as they should, even in certain times their values are increasing. For example, US dollar's value increased in certain times of the global crises. This is an absolute abnormality in consideration of PPP, international fisher effect and fisher effect theories mentioned earlier. Whether or not this situation is created by disinformation activities, it is an abnormality.

In this abnormal climate: investors are having difficulty in assessing their investments. Since there is no real earnings, savers don't make their savings in terms of currencies and prefer stagnant savings or investing instruments such as gold which stagnates the

economy. In other words, there are strong reasons to stay away from currencies. If the global financial institutions and markets, try to stay away from the currencies there could be much more chaotic economic problems in the future.

8. Conclusion

This study has tried to explore the disinformation activities on the basis of finance. In the study disinformation activities classified under 5 headings; (1) subconscious disinformation, (2) systematic distortion of truth, (3) complete rejection or ignorance of certain aspects, (4) distracting the attention by foisting unrelated or un-credible information and (5) complete set up.

All through the history, there has always been disinformation activities. It is sometimes used to catch a prey or beat the enemy. Disinformation activities take place in the wild life as well. Certain creatures like chameleon change her color or outlook to hide or to trap the prey. So, the nature of life consists of many disinformation activities and tolerates them.

In contrast to ecological system, financial systems cannot tolerate disinformation activities because the markets are based on perfect market theory which requires timely and accurate information flow to all parties. But evidences at the beginning of the global crises and the accounting scandals clearly indicate that in the last two-decade disinformation activities used widely by the organizations to get competitive advantages.

For companies providing competitive advantages are vital for growing and even for surviving. With the globalization, many of the absolute competitive advantages are diminished or leveled off such as: cheap labor, easier and cheaper transportation, easy access for exportation and importation etc. The only remaining absolute advantage would be technology development capability; however technological developments can also be easily captured in comparison to the past. Diminishing of these advantages, lead certain organizations to create other competitive advantage: disinformation, even if it isn't moral. With disinformation activities, some of the organizations gained certain advantages against to their rivals until they caught (as is happened in accounting scandals). Inconsequence markets' efficiencies reduced.

Similarly, globalization is also effected (reduced) the developed countries' competitive abilities, resulted with high budget deficits. Policy makers of these countries have recognized the success of the lower valued currencies' success in international trade and they also started to implement such lower valued currency policies. Indeed, these policies can mainly be considered as "disinformation policies".

Deficiencies in currency valuation can create a series of problems such as: misevaluation in shares and bonds, in company values, miscalculation in risk assessments.

These deficiencies can mislead the professionals while taking strategic decision. There are always wrong strategic choices in the business life but when majority of the strategic choices are false the result is called crises.

One suggests there are two main precautions for the global crises (1) new accounting regulations which certifies the correctness of accounting and financial information. (2) a unanimously accepted agreement about the currency valuation like Bretton-Woods model which guarantees the currency values are correct. This study also suggests temporary solutions: like pumping liquidation to the markets, are not the solutions that can solve the chronic global crisis.

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