Information Trading in Terms of Brokers' Functional Cognition: an Exploratory Single Participant Experimentation

Information Trading en términos de cognición funcional de los corredores: un estudio exploratorio experimental de un solo participante

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ABSTRACT

Information trading (henceforth IT) is a criminal offense in the vicinity of mega stock markets. It gives an unfair and illegal advantage to the buyer of related information. The national and global damage caused by this sort of delinquency is immense, in a yearly scale of trillions. On top of the applied importance of such offenses, they pose a meaningful theoretical and empirical challenge. The present proposal offers an attempt to exemplify the viability of the Functional Theory of Cognition and the methodological counterpart of the theory, Functional Measurement, as a means to establish a basis for related profiling attempts in terms of the functional way IT is coded in the beholders' (i.e., senior brokers) cognitive system. An exemplary single-participant functional measurement is presented along with a demo empirical illustration of the way the distinction between Type A and Type B brokers can contribute to due profiling. Possible future related scientific ventures are pointed at briefly.

Keywords
Information Trading, functional cognition, functional measurement.

RESUMEN

El intercambio de la información (en adelante IT) es un delito en el entorno de los mega mercados de valores. Esto da una ventaja injusta e ilegal a los compradores de la información relacionada. El daño nacional y global causado por este tipo de delincuencia es inmenso, en una escala anual de miles de millones. En el punto más alto de la importancia aplicada, este tipo de delitos que suponen un desafío teórico y empírico significativo. La presente propuesta ofrece un intento de ejemplificar la viabilidad de la Teoría Funcional de la Cognición y su contraparte metodológica, la Medición Funcional, como un medio para establecer una base para los intentos de perfiles afines, en cuanto a la forma funcional en que el IT está codificado en el sistema cognitivos de los espectadores (específicamente en los corredores de alto nivel). Una medición funcional de un solo participante ejemplar se presenta junto con una demostración empírica de la forma en que la distinción entre los corredores de Tipo A y Tipo B puede contribuir al objetivo de establecer dichos perfiles. Posibles futuras investigaciones científicas relacionadas se señalan brevemente.

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Financial delinquency might have quite a few facets. For instance: (a) inside trading (see the case of Dennis Levine, Michael Milken, and Ivan Bosky, convicted in 1989); (b) illegal trading or hiding of losses (see the case of Barings Bank of London – The oldest Bank in England, brought down by a rogue trader Nick Leeson, convicted in 1995); (c) lying to federal agents on trading activities (see the case of Martha Stewart, convicted in 2004); (d) stealing money from clients (notice the case of Bernard Madof, convicted in 2009); (e) impersonating other person in order to steal money (see the case of Mark Dreier, convicted in 2009); and (f) hedge fund, mutual funds, and pension fund fraud (the most recent case is Raj Rajaratnam, the head of Galeon, one of the largest Hedge Funds in the world who was convicted of fraud in 2011).

This exploratory empirical note focuses on the most severe type of financial delinquency, inside trading, i.e., illegal trading of information in a way which breaks the fairness of the financial market game (henceforth IT). The uniqueness of such criminal acts is due to a combination between its mundane validity and the difficulty to trace related acts. Perhaps, most IT offenses and most offenders in this respect do not fall in the hands of enforcement and law agencies. We claim that psychological exploration of the way such unlawful ventures are coded in the mind of the beholders shall boost attempts, substantive and applied (i.e., preventative), to gain related knowledge.

This work is based on Anderson's (1996, 2008, 2013) Functional Theory of Cognition (henceforth FTC), which is deliberated to account for the way information associated with IT is coded functionally in the cognitive system of the beholders in terms which are used to be labeled as "Functional cognitive schemata", IT schemata in the present context. To exemplify the empirical viability of the functional paradigm two pretests, which are described below, were conducted. Moreover, we consider the psychological distinction between Type A and Type B individuals (Jenkins, Zyzanski & Rosenman, 1979) - Type A-B brokers in the present context - as a possible contribution to the issue of brokers' decision to get involved in IT (henceforth IT tropism), and accordingly embedded it into the proposed model.

Rational and irrational facets of information trading

There are quite a few bodies of scientific knowledge which deal with decision making in general terms (Boumans, 2011; Smith, Shanteau, & Johnson, 2004) and specifically decision making in financial contexts (e.g., Fellner, Güthb, & Maciejovsky, 2009; Kahneman, & Reipe, 1998; Yang & Ju, 2012). From the irrational hemisphere of this phenomenon the thoughts, ideas, and empirical work of Arieli (e.g., 2008; 2012,) and Kahneman (e.g., Kahneman, 1988, 1994, 2000) are worth noting. At the other pole of the rationality-irrationality quasi-generalized axes there are those, notably Aumann ([1987], 2008), who promote the postulate of rationality, especially within the framework of game theories. The present composition attempts to contribute to this mega-issue from the perspective of integrative cognitive processes at the criminal edge of the scale of financial decision making.

Financial markets have their own rules, to which anyone who wishes to remain a legitimate player has to obey. Naturally, a broker who decides to get involved in IT knows that he or she risks his or her position as a player in the financial market, and moreover, as an innocent citizen. To do this, after all the personal investment in becoming a professional, a broker has to go through some unusual experiences, possibly negative, especially long term financial

distress and short term failures.

This presumption came out of content analysis of interviews with two senior brokers in the Israeli finance market (see below). They spoke of two salient sorts of factors – consistency/inconsistency of the market (which colors the situation as being 'green' or 'red') and negative personal results in the last market days. These elements can function in an integrative way in the mind of a broker, as derivatives from the FTC (Anderson, 1996, 2008, 2013). If the viability of this view will be established empirically, an integrative facet can be added to the mounting heap of scientific knowledge on the rationality/irrationality of financial decision making (e.g., Bicchieri, 2003; Brase & Shanteau, 2011; Chetan, 2011; Earle, 2009; Edward & Errouaki, 2011; Giuseppe & Enrico, 2013; Kahneman, 2003; Zafirovski, 2013). Firstly, an exemplification of the viability of the analysis of financial delinquency in terms of functional cognition is presented below.

Information trading as information integration

Cognitive social psychology offers a rather innovative functional cognitive paradigm, an integration between the Information Integration Theory (Anderson, 1991a, 1991b) and *Functional Measurement* (Anderson, 1982, 2001; Hofmans, Shanteau, & Masin, 2012), the methodological counterpart of the theory (henceforth IIT-FM). The FTC, a derivation from IIT, focuses on functional aspects of social judgment and moral cognition. This theory has already exemplified its viability as a means to offer an integrative view on the way social and moral phenomena are coded in individuals' cognitive system (Anderson, 1996, 2008, 2013; Wolf, 2001, 2002). The postulated qualities of such a mechanism which are relevant to the present context are as follows:

1. Such mechanism facilitates the development of a concise view of any reality which is meaningful for a given individual (conventionally, the term "Functional Cognitive Schema" is used as a representation of this construct).
2. The related mechanism channels spontaneously relevant and available information into the functional cognitive processor of this input.
3. Following subjective valuation operation of the given stimuli, which are part of the available information sources, spontaneous subjective importance is assigned to the to-be-processed information, depending on the individual's circumstantial goals.
4. The integrative result of this process (labeled here 'schema') should be reflected in a scalable response and in operative decisions as well.

A preliminary exemplification of the ability of the IIT-FM paradigm to provide a viable framework for the study of delinquent financial decisions is presented here. This framework requires an algebraic formulation of any specific sort of information integration in a format that states what should be the presumed observable response which should be a function of subjective arrangement of information from the presumed sources of information.

Pretest 1: Functional perception of risky financial decision

Pretest 1 was purported to test such a schema. The complex design of this Pretest was made of a combination of two basic schemata – cost-benefit and experience-anticipation, with a special reference to the distinction between rationality and irrationality, as formalized in Formula 1. The symbol R in the formula denotes estimated likelihood that a protagonist (imagined by the participant) will decide to make a risky financial decision. The symbols C-B and A-E (the former is nested in the latter) denote cost-benefit and anticipation-experience, respectively.

$$R = [C \oplus B] \oplus [A \oplus E] \quad (1)$$

Method

Design considerations. Formula I Serves as a schematic experimental model, which was modified operationally according to preliminary questioning of a senior broker (a team manager) from the Tel Aviv stock market. Based on a pretest with other two (junior) brokers, it was decided to allocate two levels, little and much, to each component of the schema A $\oplus$ E; i.e., little anticipation to have a prompt success and much anticipation to succeed promptly; the two levels of experience were success and failure. The two components of the other joint schema, C $\oplus$ B, had three levels each – little, some, and much.

Another senior broker participated in a sort of an experimental case study which was designed according to the basics of the FM approach (Anderson, 1982, 2001). During an individual meeting with the experimenter, the participant was exposed to four sub-series of an experimental design made of nine episodes (overall 36), to all of which the participant was required to respond. Each of the sub-series was made of a 3 x 3 bi-factorial (C x B) design intended to provide a reflection of one of four aspects (2 x 2) of the related schema (A x E). The C x B design was embedded in the A x E one, to make a sophisticated reflection of a quadratic schema, made of two binary schemata, as detailed below.

Procedure. In each of the nine episodes of the C x B design the participant was asked to imagine to himself, as vividly as possible, a broker who has to decide whether or not to make a risky investment in the finance market. Information on a specific combination between the level of estimated cost and estimated benefit was provided to him. He was asked to reiterate the specifications of the episode in terms of the predictable cost and benefit, and then requested to make a spontaneous estimation of the likelihood (0-100) that the protagonist will make a risky decision under such conditions.

The experimenter recorded each estimate in the right cell of an empty matrix of the design, printed on a pre-prepared sheet of paper.

Meaningful comments made by the participant were recorded as well. This procedure, which lasted about 10-12 minutes, was repeated three more times, to enable the gathering of ratings which relate to all four meta-parts of the complete design, following a 4-5 minutes of interval (small talk between the experimenter and the participant). The entire session lasted about one hour.

Results and discussion

The two components of the extended design were anticipation (positive and negative) of the protagonist at a given market moment and prompt experience in terms of a series of repeated success or failure in the last 2-3 business days. The entire set of the participant's likelihood estimations is presented in Figure 1 in terms of the experimental model.

Figure 1
The likelihood ratings of the participant in terms of the experimental model
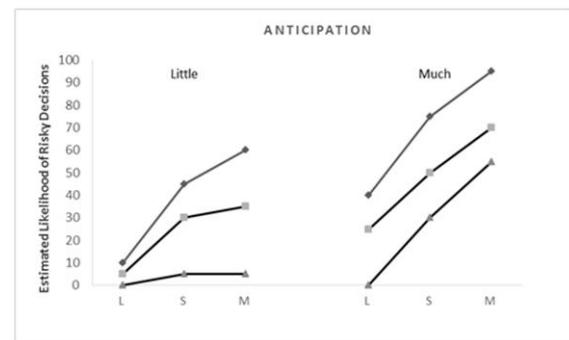
Source: own work

The complete set of original likelihood estimations of the participant is informative in terms of two relevant statistics. First and simple, the mean of the 36 likelihood estimations is a sort of generalized indication that the entire approach to risky decisions is somewhat cautious, i.e., mean of 32.66 on a 0-100 scale. The substantive statistic, the relative importance assigned to all fractions of the hypothesized binary twofold (i.e., quadratic) schema, IT = [C $\oplus$ B] $\oplus$ [A $\oplus$ E], seem to require some literature search and analysis.

The analysis of Anderson (1982, pp. 266-270), under the title "relative range index", is the right guideline for such arrangement of the given ratings. Anderson states that "although the end points of the [stimulus] range may be somewhat ill defined, they may be sufficiently definite for certain purposes." He presents an example of meal preference, where the graph which represents the original (mean) ratings show that the main course was perceived as more important than the vegetables (Anderson, 1982, p. 266); this conclusion is based on a comparison between the vertical extent of the curves which represent the two effects, assuming that "… both stimulus variables covered a reasonable ecological range." The author states that "within that frame of reference, it may be meaningful to speak of the relative importance of these variables in overall meal preference", and he offers to use the following ratio – a given independent effect (beyond all effects) divided by the sum of the entire set of independent effects.

That is offered here to relate to schema components as synonymous to Anderson's term "effects", and to compute the relative importance assigned by the participant to each component of each one of the two binary schemata ($C \oplus B$ and $A \oplus E$) and to each component of the quadratic schema ($C \oplus B \oplus A \oplus E$). Linearity, however, is an issue to cope with. Anderson (1982, p. 269) states that "unless the linear model holds, the index may not be very meaningful." He writes, however, that "in practice, some real non-parallelism might be tolerated, but this example illustrates the need for substantive theory in any use of the relative range index." The present focus on a sort of mega theory (yet quite vague) of risky economical decision is taken here as a conditional possibility to use the concept of relative importance and apply the measure offered by Anderson (1982, pp. 267-269) as a computational definition of this concept.

In the present context, relative importance (henceforth RI) is the ratio of one component of a specific schema divided by the sum of the other components. Let us begin with experience-anticipation. The symbols E and A denote the difference between the means of the two levels of each component (rows and columns, respectively).

The complex model of Pretest 1 is made of a combination of two bi-faceted schemata – A $\oplus$ E nested within C $\oplus$ B. The main statistic is supposed to represent the relative importance assigned to these schemata components. The calculation of these ratios should be based on the independent importance assigned to them, as presented below.

Beginning with experience, the requested value of independent importance is the difference between the mean of ratings in all 18 conditions of success and the same mean in the conditions of failure, $35.28 – 21.44 = 13.84$. The concomitant value of anticipation is $34.33 – 22.39 = 11.94$. The independent importance of it is the difference between its lowest and highest value, i.e., $47.92 – 9.42 = 38.5$. The same calculation for benefit results in $43.33 – 9.42 = 33.91$.

As noted above, the end result of this computation is a sort of representation of the relative importance assigned to each schema component. Each of the four components might belong to two types of schema. One is the original binary schema, either A $\oplus$ E or C $\oplus$ B. The other one is the quadratic schema, i.e., [A $\oplus$ E] C $\oplus$ B].

The value of the first type of ratio is between any specific independent importance and the sum of the two related independent statistics. Let's begin with A $\oplus$ E. The relative importance (henceforth RI) assigned to A (RIa) should be $A/(A + E) = 13.84/(13.84 + 11.94) = 0.54$. The relative importance assigned to E (RIe) should simply be $1 – Ria = 1 – 0.54 = 0.46$. Based on the same sort of computation, the relative importance assigned to the two components of the other binary schema, i.e., C $\oplus$ B, is as follows $RIc = 38.50/(38.50 + 33.91) = 38.50/72.41 = 0.53$ and the complementary relative importance is 0.47. It can be concluded that the two binary schemata are quite balanced in terms of the assignment of relative importance. Nevertheless, this is not the case when all four related statistics are computed within the framework

of the quadratic schema, i.e., [A ⊕ E] [C ⊕ B], as detailed below. The relative quadratic importance of A should be A/(A + E + C + B) = 13.84/(13.84 + 11.94 + 38.50 + 33.91) = 13.84/98.19 = .14. The relative importance of E, C, and B are 0.12, 0.39, and 0.35 respectively.

The quadratic picture seems to point to an imbalance between the importances assigned to the components of the two binary schemata. Evidently, the components of the quasi rational schema, i.e., C ⊕ B, are assigned with much greater importance than the components of A ⊕ E – 0.39 + 0.35 = 0.74 vs. 0.14 + 0.12 = 0.26. This focus of the senior broker which participated in Pretest 1 might be considered as a marker of cost-benefit as a substantive rational process of information processing (integration) in regular conditions of brokers' financial decisions (e.g., Kahneman & Reipe, 1998). However, the rationality of the very decision to get involved in financial delinquency might be questioned.

Overall, these very modest findings, which are made of one participant experimentation, relate to his functional cognitive coding of risky financial decisions. His assignment of relatively much greater importance to a binary rational schema than the importance assigned to a rather not rational schema (C ⊕ B and A ⊕ E, respectively), is evident. Nevertheless, while gaining some confidence in the viability of the FM approach to the issue of risky financial decisions, the special case of this issue, a decision to get involved in information trading, does not look as if it obeyed rational processing. Presumably, the substantive motivation of those who committed the illegal acts in finance markets, which were mentioned at the onset of this composition, and many others who were not caught by the authorities, was not necessarily rational. Pretest 2 was intended to shed some light on the way IT tropism (i.e., a shift toward delinquent financial decisions) is coded functionally in the beholders' mind.

Pretest 2: Functional perception of information trading

Having the encouraging results of Pretest 1, which were related to daily risky brokers' decisions, but not having any viable scientific knowledge on functional perception/conception of information trading, we firstly interviewed individually two junior brokers from the Tel Aviv stock market. Each of them was asked to elaborate freely on issues of financial delinquency, with a special reference to IT. Not surprisingly, the two of them were quite familiar with the abovementioned famous overseas criminal cases and with cases of IT in Israel. They stated that detecting such offenses is practically impossible due to their elusive nature. A thorough analysis of the content of these brokers' verbal reasoning resulted in the conclusion that the following combination of three factors should affect brokers' decision to get involved in financial delinquency. Two of these factors (numbers 2 and 3) belong to the rather not rational binary part of the quadratic schema presented in Formula 1 (assuming that the other binary part of that formula, i.e., cost and benefit, should be rational):

1. Long term financial distress (hence D), usually resulting from a long sequence (months) of buy-sell failures, reflected in a straining cash flow difficulty (Figner et al., 2009; Lopes, 1987).
2. Anticipation (A), a factor which was already included in the model of Pretest 1.
3. Experience (E), another factor that was already included in the model of Pretest 1, which was matched with A.

Based on this preliminary insight, Pretest 2 was designed, using the basics of FM approach to explore the viability of the three componential IT schema, a formal representation of which is presented in Formula 2.

$$IT = A \oplus E \oplus D \quad (2)$$

Method

The focus in Pretest 2 was on a three component (A, E, and D) schema, which relates to somewhat not rational facilitators of IT tropism. Accordingly, this time the rating (dependent) variable was an estimation of the likelihood that the protagonist (an imagined broker) will get involved in IT. The degrees of A and D were little, some, and much, while (as implied from the preliminary interview) those of E were balanced experience (a mix of success and failure), failure, and success in the 2-3 days before the temptation to get involved in IT.

The participant, a senior broker from the Tel Aviv stock market, was asked nine times, in an incidental order, to imagine to himself, as vividly as possible, a broker facing a requirement to make a series of decisions whether or not to get involved in IT. In each of the imagined episodes he was asked to assume a specific combination of levels of the components of the model, as detailed below. With regard to each episode he was asked to estimate spontaneously the likelihood that the protagonist will decide to get involved in IT.

To avoid confusion between the schema components (A and D) which have three orderly levels (little, some, and much) and the nominal component (E), the participant was exposed three times to the nine conditions of A x D (in an incidental order) in three different sessions, the time interval between them being one week. In each one of these sessions, he was exposed to a different condition of E in the last 2-3 days in the following order – balanced (a mix of success and failure), success, and failure. In each episode the participant was asked to imagine to himself a broker acting presently (last two-three days) in market conditions which are personally balanced for himself in terms of success and failure; at the 2nd and 3rd sessions he was asked to think of a broker who has presently experienced considerable success or failure, respectively. To receive a more reliable set of the nine estimates in each of the weekly sessions, each set was replicated in the same session, following an

interval of 10 minutes and the two estimates in each of the nine cells were averaged.

Results and discussion

The (independent) means of each of the three components of the $A \oplus E \oplus D$ IT schema, beyond the other two components, were computed as a preliminary statistical treatment of the participant's ratings, which are presented in Figure 2. These statistics for A and D – 22.44, 44.22, 70.56 and 34.89, 45.56, 56.78, respectively – can be considered as indicative of a nearly linear scaling of the orderly stimulus levels (i.e., little, some, much). Nevertheless, these values for E, the nominal component —24.22, 52.44, 60.55 (balanced, failure, and success)— seem to be thought provoking; they imply that both imbalanced short term conditions, failure and success, were perceived by the participant as having the potential of facilitating a much greater tendency for IT tropism than a mixed condition.

In other words, a balanced short term experience may moderate IT tropism. One possible account for this sort of effect is the hypothesis of moral/judgmental modularity (Wolf, 2001, 2002), which predicts cognitive behavioral shifts as a function of social-motivational facets. Based on future replications, such sort of motivational inclination could be included in future IT profiling.

With regard to the relative importance assigned to the three components of IT schema, i.e., RIa, RIe, and RId, the respective values —0.484, 0.284, and 0.232— look meaningful. They seem to reflect a nearly balanced assignment of importance to personal implications of long term and short term professional experience, D and E, (0.232 + 0.284 = 0.516) and anticipation (0.484), a sort of idiosyncratic quasi-emotional integral of the entire array of personally meaningful vectors.

Having a psychologically reasonable pre-preliminary empirical illustration of an IT schema, the possibility of a more inclusive profiling of IT tropism of IT prone brokers

should be considered. In terms of the current psychological profiling approach, any attempt to construct a viable profile of brokers who are susceptible to IT tropism should relate to the way IT schemata interact with a relevant source of individual differences, such as Type A-B.

Figure 2
Mean Estimates of the Likelihood of IT Decision Made by the Participant.
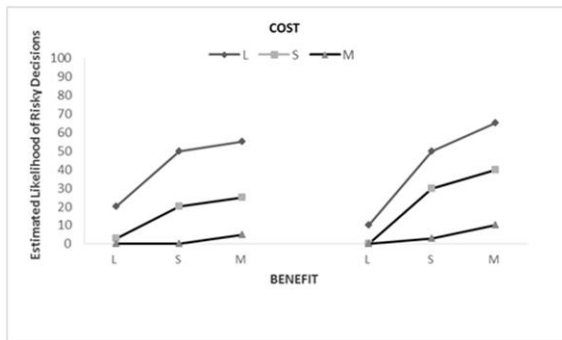
Source: own work

Type A-B

Psychology, from the onset of its modern phase, has been dealing with the distinction between responses attributed to individual differences and responses attributed to circumstantial factors. For a long period of time in the mid 20th Century, many researchers specialized in only one of these two accounts for psychological phenomena, either individual differences or situation effects. Nevertheless, the evolution of psychology seems to overarch the two approaches and currently it is hard to find any reported study which does not attempt to examine and validate an integrative model in this respect. In the present context, an exemplary model which relates to individual differences in the context of factors which facilitate IT tropism is offered.

For the present issue, the most appealing seems to be the distinction between Type A and Type B brokers. The Type A-B construct was formed originally as a psychological correlate of coronary disorders (Jenkins et al., 1979), which focuses on the difference between excessively ambitious people (Type A) and those who put everything in a balanced proportion (Type B).

A distinction between Type A and Type B brokers seems to offer itself in the context of the IT issue. The construct of Type A-B is a feasible measure of individual differences in the present context. Growing scientific knowledge provides an impressive support for the original construct in a variety of contexts (e.g., Jex, Adams, Elacqua, & Bachrack, 2002; Thornton, Thornton, & Gold, 2011).

It derives from this construct that Type A brokers should be IT prone in two terms which were discussed above – moment to moment buy-sell decisions and a decision whether or not to get involved in IT. The moral modularity hypothesis (Wolf, 2001) asserts that any functional moral schemata of any individual with regard to a given morally loaded situation should change according to motivational personal changes. As derived from this hypothesis, Type A brokers are expected to swing toward riskier decisions in distressing conditions, more than Type B brokers.

In the context of IT, most interesting are brokers who belong to two categories – those who receive the highest and lowest scores on the Type A-B test (Spence, Helmreich, & Pred, 1987), depending on which two extreme they incline to, the former (Type A) as a target group and the latter (Type B) as a control group.

As implied from the financial delinquency episodes brought at the onset of this composition, the unavoidable difference between excessively ambitious finance people and those who put reality in a balanced proportion make Type A-B a feasible type of reflection of individual differences in the IT context. It derives from this construct that Type A brokers should be risk-prone in two terms which were discussed above – moment to moment decisions whether or not to buy or sell, and a decision whether or not to get involved in IT (Pretests 1 and 2, respectively).

As derived from the hypothesis of moral/judgmental modularity, (Wolf, 2001, 2002), a Type A broker is expected to shift from a balanced state of decision making toward an IT tropism state in an imbalanced condition. In terms of the presumed functional cognitive schema, $IT = A \oplus E \oplus D$, it should be in

a state of little anticipation (A) for success, repeated failures in the last 2-3 business days (E), and severe distress. A comparison between Type A and Type B brokers in terms of a hypothetical FM experiment is expected to reveal an assignment of greater importance to experience (E and D) than the importance assigned to anticipation (A) by Type A brokers in such oppressive conditions, as well as much higher estimated likelihood of IT decisions.

Conclusions and prospective remarks

Concluding comments

Financial delinquency in the form of information trading rolls amounts of money in extents nearly beyond imagination, i.e., trillions in one financial year. This sort of offense is so sophisticated and elusive that it is considered by the tax authorities as being too hard to detect. The only simple statement hat can be made regarding this problematic phenomenon is possibly that its mundane validity is enormous. We were not surprised not to find any systematic scientific effort to get on the footprints of such offenders. A lack of conceptual framework, a lack of large enough grant money, and a lack of cooperation of brokers are just a few of the problems which anyone who wants to pave a way for related profiling is facing.

The analysis proposed here is discussed to exemplify a cross-paradigm (circumstantial and dispositional) view on IT tropism. A possible way to produce partial diagnosis of brokers' tendency to make a decision to get involved in IT was demonstrated via single participant experimentation, based on the FM approach. The prospect of overarching between such a functional cognitive profile and the disposition called Type A-B was mentioned. Of course, a systematic empirical investigation of the viability of such an overarched profile is needed.

Winner effect

There is a mounting heap of scientific knowledge which shows greater reckless and irrational financial decisions in conditions of a series of successful investments (in three-four years). This trend is mediated by an increased level of testosterone (Apicella et al., 2008; Blanco Ibañez, Blanco-Jerez, Baca-García, & Saíz-Ruíz, 2001; Sapra, Beavin, & Zak, 2012; Takahashi, Sakaguchi, Oki, Homma, & Hasegawa, 2006; Zethraeus, 2009).

A suggestion that this winner effect might apply to the phenomenon of IT is implied. Not having sufficient clues, besides an indication that there might be an inverse, i.e., loser effect, an attempt to merge the winner effect notion in the functional paradigms, necessitates a replication of each one of the two related experimental models which will form three conditions. In one condition the participants will be brokers who have been exposed to a combination of long term distress and actual failures. The participants in another condition will be brokers who have had a positive combination between long term and actual success, and the participants of the 3rd group will be brokers who have had a variable success and failure experience.

Cross-cultural perspective

Cross-cultural approach to the issue of IT tropism seems to be suggestive if the hereby proposed venture will take off. Special importance has to be granted to the difference between finance people who live and function in the world's finance capital, the US, such as New York City and Chicago, and overseas finance people, who live on the other, rather provincial, bank of the financial river, i.e., Israel. The difference between the American and Israeli finance markets is like the difference between the Niagara Falls and the Jordan River. In the terms of this composition, the related finance markets (i.e., the US and Israel) can be viewed as Type A and Type B markets, respectively. Are there respective differences in terms of willingness

to get involved in IT? A large scale research, primed by the present exploration, might provide some answers.

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