

The Rhetorical Function of 'IF-Clauses' in Finance Academic Papers

Tharwat M. EL-Sakran & Nawar N. Saba

American University of Sharjah

Sharjah

United Arab Emirates

Email: telsakran@aus.edu

1

Abstract

It is important for people to understand the meaning behind many words that are used regularly in order to grasp the author's idea and intended meaning. In scholarly journals, some authors tend to use words that express possibility or doubt in their articles. Conditional 'if' is a hedging technique used by authors to protect their reputation and credibility. One cannot publish a research paper and claim 100% certainty of the results in a world in which nothing is certain except death. If a publishing institution or a journal is to publish a paper which takes full responsibility of its claims, it risks being sued by an unfortunate 'victim', if those claims do not materialize. This research investigates and discusses the use of conditional if-clauses in finance academic research papers. It examines a variety of articles from different business journals to understand how, and most importantly, why the conditional if-clause is used. Results show that placing if-clauses in sentence initial positions makes readers almost immediately question or doubt what the writer's communicative intention is. It is almost like a defense position which is switched on and focuses on the condition that must be fulfilled rather than the main concept. This seems to be an academic community practice where writers are expected to be transparent, objective and direct. Consequently, finance students need to be sensitized to the rhetorical function of conditional if-clauses in the field in order for them to become efficient and competent members of their relevant discourse community

Key words: hedging, if clauses, conditionals, uncertainty, finance academic writing

1. Introduction

In a shaky world of uncertainty, especially in the business and financial sectors, decision makers and businessmen may have to fine tune their propositions to reflect the uncertainty that prevails and surrounds the world of business. This study presents evidence that professional and prospective business executives are in a dire need to learn, master and use hedging devices in both their oral and written communications to save their face and their reputation. Therefore, using English for the purpose of writing academic research requires academicians to, sometimes, use conditional sentences. This may be exceptionally true for a specialized field which is considered to be a hybrid or a mix between soft and hard sciences-Finance. Conditional sentences mainly occur in the form of if-clauses. In his book, Hewings (2005:166) explains how an if-clause may be used to present certain conditions under which an outcome may occur. This is why it may be referred to as conditional if.

In the hard sciences, researchers test their hypotheses by following a detailed scientific method to come up with the most accurate and objective result they can. Finance, as a soft science, remains an art besides being a science and requires some subjectivity in the form of assumptions. On a daily basis, assumptions and probabilities are designed to be fed into magical formulas which blurt out a magical figure. Predictions of how long a company may sustain a certain growth rate, future cost of capital, customer loyalty, political stability – these are but a few of the assumptions researchers and financial analysts undertake to build their projections, cannot be made with 100% certainty. While these assumptions may be as conservative as possible and may follow reasonable thinking, these are still assumptions. Bias still exists due to the analysts' judgment. *If, and only if, these assumptions materialize, will the company profit millions of dollars or double in size or, or, or.* But, this is only if these certain stipulated conditions are fulfilled.

2. Objective of the research

It is the purpose of this research to investigate the use of conditional if-clauses as used by researchers in the field of finance from the viewpoint of discourse analysis with the aim of seeking pertinent textual information that could be incorporated in English for Specific Purposes (ESP) teaching materials; specifically English for Finance. This research examines a variety of articles from different business journals to understand how, and most importantly, why the conditional if-clause is used. This research is not concerned with the grammatical rules of if-clauses that qualify the main clause. In other words, this research overlooks the verbs used to make a condition possible or impossible, be it present or past tense. Instead, this research is targeting the frequency of use of all conditional if-clauses, regardless of their type.

3. Literature Review

Hedging devices, as features of written academic discourse have been subjected to scrutiny in discourse analysis studies as tools for softening writers' claims when in doubt about their certain materialization. Copious studies (e.g., Alonso, Alonso and Mariñas, 2012; Crompton, 1997; EL-Sakran, 2009; EL-Sakran and Nada (2014); Hyland and Bondi (2006). Martín, 2008; Pindi, 1988; etc., have listed the following as examples of the various hedging structures used in academic writing in English:

1. Modals

may, might, could , can

2. Verbs

Suggest – indicate – estimate – assume – appear

3. Adverbs

Probably, possibly, perhaps, maybe, apparently, seemingly, presumably,

4. Adjectives

Probable , possible , uncertain , unlikely

5. Nouns

Probability , possibility, assumption, evidence, likelihood, claim

6. Attribution

According to, etc.

7. Conditionals

- Ali has four goats , if not more.
- If conditionals and any other form deemed capable of functioning as the conditional form if.

8. Lexical hedges

About, almost, approximately, approaching, around, in the region of, near(ly), some, towards , roughly.

9. Passive Constructions

It has been agreed that

10. It – constructions

It is stated that ...

11. There- construction

12. Vague indefinite pronouns: one, (someone), (anything), etc.

13. Framing statements:

- In the absence of any major changes in the world, it is...
- If demand weakens, ...
- Assuming more normal weather conditions,
- On the assumption of a continuation of present policies boom in the constructive sector,...

As stated earlier, this research is mainly concerned with the communicative function of if-clauses. Azar (1992) states that a conditional sentence with an if-clause is a contrary-to-fact sentence because “if” is used to talk about [...] situations that are the opposite of the true situation” (p.389). She points out that these if-clauses may appear at the beginning or at the end of a sentence, depending on what the writer wants to amplify. Along the same lines, Longacre (1983:102) refers to if-clauses as preposed or postposed parts of sentences. For him, these sentences subordinated clauses state:

... a relation between an antecedent and a consequent, i.e., the consequent does not follow unless the condition stated in the antecedent also holds.. e.g. **If she's there, I will stay.** In such a condition as this, we are not told whether she is there or not. We are only told that my staying is conditioned upon her being there (Longacre, 1983:101).

The main focus in this study is on conditionals expressed solely by if-clauses "...because **IF** is the most widely known conditional marker (Pindi, 1988:212) in finance academic journal articles. From a grammatical perspective, clauses containing conditional if contain at least two clauses; a main clause making a prediction and a subordinate clause stating the condition for the materialization of the prediction.-

The literature on why business writing may make use of conditional sentences is lacking. The literature available explains how to make if-clauses, which this paper is not concerned with. All the relevant literature looked at explains that an if-clause is a conditional sentence. From this, one may infer that if-clauses are used as a way to hedge one's assertions. By allowing a notion of probability in one's claims, one protects themselves from getting into trouble if those claims do not happen.

Wallwork (2011:133) argues that "particularly in the Discussion and in the Conclusions you may occasionally need to use words and expressions that are not too direct and seem more tentative." He notes that the skill of critically analyzing matters with 'caution' compromises this "culture concept of 'face saving'". Face saving, he defines, is to avoid putting oneself or another in a situation "where others could perceive [...] them as having failed." He puts it perfectly well when he states that "Hedging entails anticipating possible opposition by your referees and readers by not saying things too assertively or directly." He also touches upon the importance of hedging from the researcher's point of view: it helps him/her gain credibility. However, Wallwork reminds us that everything should be in moderation. Overhedging may be ineffective as the researcher's opinions may seem only that – vague, unassertive opinions.

4. Study Methodology

This section is divided into three subsections: data, analysis and statistical procedure. The data subsection describes the text type this research looks at. The analysis subsection defines the procedures for analyzing the data. The statistical procedure subsection explains the methods used to statistically analyze the findings.

4.1. Data

For the purpose of this research, the writers have chosen 31 journal articles from two different journals in the field of finance as outlined in table 1 below:

Journal Title	Number of Articles
Journal of Advanced Studies in Finance	7
Journal of Applied Finance and Banking	24
Total	31

Table 1: Details of data sources

All the articles were selected from the 2012 issues.

Each journal's specification is explained briefly below:

1. **Journal of Advanced Studies in Finance:** This journal is published twice a year – summer and winter. The total articles for each publication are seven and five respectively. Thus, the total articles culled from this journal amount to seven; four from the summer issue and three from the winter one.
2. **Journal of Applied Finance and Banking:** This journal was published six times in 2012. Since each issue contains more than ten articles. We have decided to pick four articles from each, ending up with a total of 24 articles.

To eliminate any potential data bias, the articles were randomly selected from each journal in the hope that the samples would represent the population. To do this, the authors only picked out odd-numbered articles from each publication, that is, article number one, article number 3, article number 5, and so on.

A pre-test was carried out on some of the articles and it was found out that the discussion sections contained the most conditional-if clauses relative to the results sections. Thus, a decision was made to focus the analysis and the whole study on this section in all the selected articles. Worth noting here that all graphical presentations that appeared in the discussion section of the articles such as tables, graphs and diagrams, were ignored.

The analysis was guided by Azar's (1992:53) statement that an if-clause = if + subject and verb and a specified condition (1992:53). Those are the ones that represented the focus of the study, whether they appeared at the beginning or end of a sentence. The distinction is not whether the if-clause starts the sentence, but whether the if-clause is presented before the main clause or vice versa. In other words, all if-clauses, whether they come before or after the main clause, were counted.

4.2. Analysis

Since the articles were in softcopy, the discussion sections from the selected articles were downloaded and a search was conducted on them for instances of conditional if-clauses via the find function (Ctrl+F). The sentence before and after all the if-clause cases were copied to capture some context, if necessary (see Appendix). The if-clause is slightly highlighted in grey to make it stand out. The authors only focused on conditional if-clauses and not those that contained "even if", which is another type of if-clauses.

4.3. Statistical Procedures

Firstly, we counted the total instances of if-clauses in the discussion section per article. Secondly, we counted how many of those appeared in sentence initial position and how many occurred at the end. Thirdly, the number of words, which made up the if-clause, was counted and compared with the total number of words in the discussion section.

5. Results and Analysis

Table 2 (see Appendix 2) demonstrates the number of if-clauses in the discussion sections obtained from the Journal of Advanced Studies in Finance (JASF), and Table 3 does the same for the second journal, Journal of Applied Finance and Banking (JAFB).

Table 2 shows that for the JASF, there were 35 instances of if-clauses across the seven articles analyzed, out of which 30 cases of the if-clauses appeared at the beginning of sentences and only 5 cases occurred at the end.

Table 3 (see Appendix 2) shows that for the JAFB, there were 29 instances of if-clauses across the 24 articles analyzed, out of which 23 cases of the if-clauses appeared at the beginning and only 6 cases in which the if-clauses occurred at the end.

Tables 4 and 5 (see Appendix 2) show the number of words the conditional sentences hosted in comparison to the total number of words in the entire text (i.e., the discussion section).

6. Discussion

Tables 2 and 3 exhibited the frequency counts of all the if-clause instances in the data. Both journals contained instances in which the if-clauses appeared at the beginning of sentences. However, those that appeared in sentence initial positions far outnumber those used in sentence final positions. A plausible justification for this practice may be that the writers, in order not to trail their readers, fronted the sentence with the condition. This way, by the time the readers read the whole sentence they are fully aware that a stipulated condition has to be met for the required or desired result or action to materialize. By placing the if-clauses in sentence initial positions, readers almost immediately question or doubt what the writer's communicative intention is. It is almost like a defense position which is switched on and focuses on the condition that must be fulfilled rather than the main concept. This seems to be an academic community practice where writers are expected to be transparent, objective and direct.

Looking at tables 4 and 5, one must remember that the total number of articles analyzed per journal differs. This is why it would not be revealing to compare and contrast the results. Instead, we are interested in the zero cases of if-clauses. Some articles did not use any if-clauses. Upon careful and close examination of the discussion sections in these articles, it becomes clear that they are analyzing ex-post data. In other words, these articles were testing their hypotheses on past data which had been already obtained. This 'actual or real' data may not pose any concern for probability since these were the actual realizations from a concept. This could be the reason why the writers in those specific cases did not use any conditional statements since there was not any future probability or prediction involved.

7. Conclusion and Pedagogical Applications

In conclusion, it is evident that academicians in the field of finance, due to lack of information or uncertainty, hedge their claims by substantially relying, among many other devices, on the use of conditional if-clauses in sentence initial positions. Such clauses are used to signify that a specific future event or occurrence may be fulfilled if a particular condition is met. Lack of conditional if-clauses in some finance articles may be an indication that the data is ex-post. The results obtained from this small scale study call for further investigations of conditional if-clauses in

other sections of finance articles and other pertinent fields. They also indicate that finance students need to be sensitized to the rhetorical function of conditional if-clauses in the field in order for them to become efficient and competent members of their relevant discourse community (El-Sakran & Nada, 2014; EL-Sakran & Zeynabi, 2014; Hesabi et al., 2013)

Towards this end, the following hedging sensitivity developing exercises could be used with finance students:

- Rewording Exercises (unqualified/qualified)

In this type of exercise, students could be presented with unqualified finance statements about future happenings and be asked to rephrase them in a more cautious way.

- Compare & Contrast exercises

For this type of exercise, students could be presented with various finance statements (i.e., qualified and unqualified) and be asked to indicate which one(s) they like and why?

- Translation Exercises

Students could be asked to translate finance statements containing conditional if-clauses from English into their first language or vice versa. Such exercises may open their eyes to differences/similarities in ways of expressing conditions in different languages.

- Video Scenes on Prediction

Here, students could be asked to watch a video, from the Youtube site, showing someone making an unqualified predication that did not materialize and the resulting consequences. Then, students could be asked to say what the person should have included in his/her prediction to protect his/her integrity.

References

Alonso, A. R., Alonso, A. M and Mariñas, L. T. (2012). Hedging: An exploratory study of pragmatic transfer in nonnative English readers' rhetorical preferences. *Ibérica*, 23, 47-64.

Azar, B. S. (1992). *Fundamentals of English grammar* (2nd ed.). Englewood Cliffs, N.J.: Regents/Prentice Hall.

Crompton, P. (1997). "Hedging in academic writing: Some theoretical aspects". *English for Specific Purposes* 16: 271-289.

EL-Sakran, T. M. (2009). Mind what you say: Modulation in business communication. Paper presented at the Sixth TESOL Arabia Conference held on Feb. 21 at the University of Sharjah, Sharjah, United Arab Emirates.

EL-Sakran, T. M. & Nada, F. (2014). Genre effects on writers' grammatical choices: The case of passive and active voices in online news leads. *Journal of Teaching and Education*. 3(1), 347-447.

EL-Sakran, T. M. & Zeynabi, A. J. (2014). Engineering master theses and logical persuasion: An investigation of the functions of logical and grammatical structures. *International Journal on Studies in English Language and Literature*, 2(2), 5-10.

Hesabi, A., Dehaghe, M. R. & Shahnazari-Dorcheh, M. (2013). A comparative analysis of the frequency and function of if-clauses in applied linguistics and chemistry articles. *Journal of Language Teaching and Research*, 4(1), 186-191.

Hewings, M. (2005). *Advanced grammar in use: a self-study reference and practice book for advanced learners of English; with answers* (2nd ed.). Cambridge, UK: Cambridge University Press.

Hyland, K. & M. Bondi (2006). *Academic Discourse across Disciplines*. Bern: Peter Lang.

Longacre, R. (1983). *The grammar of discourse*. New York & London: Plenum Press.

Martín, M. P. (2008). "The mitigation of scientific claims in research papers: A comparative study". *International Journal of English Studies* 8, 133-152.

Pindi, M. K. (1988). Schematic structure and the modulation of propositions in economics forecasting text. *Unpublished Ph. D. thesis*. The University of Aston, Birmingham, UK.

Rai, U., & Rai, S. M. (2009). *Effective communication* (Rev. ed.). India: Himalaya Publishing House.

Wallwork, A. (2013). *English for academic research grammar exercises*. New York: Springer.

Wallwork, A. (2011). Hedging and criticising. *English for writing research papers* (pp. 133-149). New York: Springer.

Appendix 1

Journal of Advanced Studies in Finance

Summer Edition: 5 articles

Article 1 (full text): Managing sovereign credit risk in bond portfolios

Bruder, B., Hereil, P., & Roncalli, T. (2012). Managing sovereign credit risk in bond Portfolios1. *Journal of Advanced Studies in Finance*, 3(1), 5-26. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1029938656?accountid=16946>

S1. To drive an economic policy and to face a crisis, there are several instruments and adjustment variables like foreign exchange rates, supply of money, prices/wages or inflation/unemployment trade-offs. If a monetary union is created, it loses the control over foreign exchange rates. In this case, an external balance deficit cannot be compensated by a depreciation of the currency and will eventually lead to higher unemployment.

S2. Because a monetary union could be viewed as a region where the exchange rate is fixed inside and flexible outside, participants of the monetary union must share some common principles as explained by Mundell: If the world can be divided into regions within each of which there is factor mobility and between which there is factor immobility, then each of these regions should have a separate currency which fluctuates relative to all other currencies. This is the idea behind the Maastricht Treaty and the Stability and Convergence Programs (SCP).

S3. Passive investors then had no choice but to sell their distressed bonds into a depressed market, leading to significant losses. From the perspective of efficient markets theory, such a risk could be acceptable if it were compensated by an additional return, resulting in similar risk-adjusted returns from the debt of different countries. However, this does not seem to be verified in practice, as Robert Arnott has pointed out (2010).

S4. Let $R(x_1, \dots, x_n)$ be the risk measure which depends on the portfolio weights $x = (x_1, \dots, x_n)$. We say that R is a coherent convex risk measure if it satisfies this mathematical property: ... This property is called the Euler decomposition of the risk measure.

S5. We notice that the third asset has a weight contribution of 20% but a risk contribution of only 5%. If we now consider a portfolio such that the risk budgets are 60%, 20% and 20%, the weights are 48.5%, 13.2% and 38.3%. This means that we must set the third asset weight to 38.3% if we want it to account for 20% of the portfolio risk.

S6. It is particularly true for the equity asset class, but it is less verified for the bond asset class. In our example, if we accept the academic rule that the average performance of active management (represented by the quantile 50%) is equal to the performance of the benchmark (represented by the DEBT indexation) minus the fees, we obtain an implied fees ratio equal to 36 bps per year. This academic rule seems to be verified.

S7. Moreover, some of these methods face some concentration problems (Roncalli, 2011). For example, if we consider the minimum variance portfolio, we will have obtained a very concentrated portfolio in Finland and Germany. Footnote 16 The numerical solution may be obtained by using non-linear optimization procedures like the sequential quadratic programming (SQP) algorithm.

8 instances: 6 appear in the beginning of the sentence and 2 come at the end.

$$219/7164 * 100 = 3.06\%$$

Article 3 (full text): Fiscal Policy and National Savings In The Czech Republic And Slovakia

Musil, P., & Vincencová, E. (2012). Fiscal policy and national savings in the czech republic and slovakia. *Journal of Advanced Studies in Finance*, 3(1), 39-48. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1029938500?accountid=16946>

S1. And it is also necessary for the government, as it is for the household, to keep its budget even from the long run point of view, or the government (and the household as well) cannot spend more than it estimates. If the government today spends more than it gains from taxes, it is necessary to spend less than it gains from taxes tomorrow. So if: $G^{\text{sub } 1^{\wedge}} - T^{\text{sub } 1^{\wedge}} > 0$, then the government creates a budget deficit.

S2. When the government does not have any initial debt or wealth, the budget line intersects the axes origin. The budget line represents the fact that if the government creates a deficit today it must gain a surplus in the future and vice versa. If the position of the government is represented by point A, the government creates the budget surplus today, which allows creating the deficit in the future. If the government stands in point B, it creates the deficit today, which implies the future budget surplus.

S3. The BL budget constraint represents the situation of the household before the taxation. Point A represents the initial income equipment of the household (Y_0 - income today, Y_1 - income tomorrow). If the government introduces taxation, the disposable income of the household will decrease in every period. We can say that the household budget line shifts leftwards to BL'.

S4. We now suppose that the government accepts some expansionistic fiscal policy and it decreases the taxes today. If the government does not reduce its expenditures as well, it implies that the government will have to increase the taxes in the future. This measure would lead to the shift of the household downwards along the BL', let's say to point C.

S5. Furthermore, the fiscal expansion does not have any income effect. Why? We have to realize, that if the government lends a unit (either currency or production) today, it pays back the same unit plus the interest $(1+r)$. What is the present value of $1+r$?

S6. There are also some important assumptions, which must be fulfilled if the B-R equivalence theorem should "work":

* households do not perceive the government bond as an additional wealth;

S7. The development of public and private consumption shows that it is very likely that the B-R equivalence theorem is not valid in the Czech Republic in the analysed period. In almost every year if the public consumption increases, the private consumption increases as well and vice versa. Only in last four years, the public and private consumption have developed against each other, which is conformai to the B-R equivalence theorem.

S8. The private and public savings in most of the years have changed in the same manner. There are only 5 exceptions - 1998, 2001, 2002, 2004 and 2008 - in these years, if the public savings increased the private savings decreased and vice versa. This isn't also sufficient proof of the validity of B-R theorem.

S9. The theorem deals with the opposite and equivalent changes in the public and private savings. In other words, the B-R theorem implies that if the public savings decrease by unity, the private savings increase by unity and vice versa, so the national savings remain unchanged. The final figure shows the development of the savings rates - public, private and national.

S10. The following figure shows the development of public and private savings in Slovakia. If the B-R equivalence theorem is valid, the absolute changes of private savings should be compensated with the opposite absolute change of public savings.

S11. If we look at the Figure 9, we can see that in each year the public savings decreased by 500 - 2500 million EUR. The B-R equivalence theorem says that if the public savings decrease by 500 million, the private savings should increase by the same volume. Figure 9 also shows that this is not the case. In most years, the private savings decreased as well.

11 instances: All 11 come at the start.

301/2805 *100 = 10.73%

Article 5 (Full text): Moody's Credit Ratings and the Stock Market Performance of Portuguese Rated Firms

Pacheco, L. (2012). Moody's credit ratings and the stock market performance of Portuguese rated firms. *Journal of Advanced Studies in Finance*, 3(1), 68-82. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1029938407?accountid=16946>

Zero instances

0/611 *100 = 0%

Article 7 (full text): The Current Financial and Economic Crisis: Empirical and Methodological Issues

Strachman, E., & Fucidji, J. R. (2012). The current financial and economic crisis: Empirical and methodological issues. *Journal of Advanced Studies in Finance*, 3(1), 95-123. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1029938508?accountid=16946>

S1. Furthermore, the continuous rise in assets prices, in spite of these minor upsetting events, seemed to corroborate almost all the market expectations as well as the algorithms used to calculate and distribute risks according to historical (which?) data (Zendron, 2006; Colander et al., 2009; Dow, 2008; Davidson, 1982-3; Minsky, 1982), and also yields, subdivide tranches, etc. Of course, the entire scheme would collapse if prices stopped to rise. In addition, houses are the

main assets for many families and, thus, several of these families used those assets with rising values to increase their borrowings through renewed mortgages, piggybacks, etc. (Goodhart and Hoffmann, 2008; Goodhart et al., 2009).

S2. And it's worth noting that while, as we've said, the European Central Bank wasn't nearly as aggressive as the Fed about cutting short-term rates, long-term rates fell as much or more in Spain and Ireland as in the United States- a fact that further undercuts the idea that excessively loose monetary policy caused the housing bubble (...) the global glut story provides one of the best explanations of how so many nations managed to get into such similar trouble (Krugman and Wells, 2010). We can agree with Krugman and Wells if the savings are understood as influencing long term interest rates, i.e., if they are used to buy and make possible lower long term interest rates for these securities. Of course, to this savings we must add, at least for some individuals and groups, US, UK, Spain, etc., private savings.

S3. Scientific law-like statements are formulated in experimental (i.e. controlled) settings ('closed systems'), where constant conjunction of events obtains because one causal factor of interest is sealed off from any other countervailing factors that bear on the phenomenon of interest, such that we can always say 'whenever (event type) X, then (event type) Y'. If valid, these statements will be successfully applied also in nature (an 'open system'). How is that possible?

S4. Traditional methodologists have a problem here: if stable conjunction of events are sought after, they are rather rarely spontaneously founded (astronomical laws, one of Lawson's favorite example of spontaneous regularity, is indeed obtained under conditions of closure, see Mäki, 1992b); if, on the other hand, the subject matter of scientific investigation is explained by the scientist's intervention, then they are bound to admit that there is no genuine laws in the nature.

S5. Truly important and significant hypotheses will be found to have "assumptions" that are wildly inaccurate descriptive representations of reality, and, in general, the more significant the theory, the more unrealistic the assumptions (in this sense). The reason is simple. A hypothesis is important if it "explains" much by little, that is, if it abstracts the common and crucial elements from the mass of complex and detailed circumstances surrounding the phenomena to be explained and permits valid predictions on the basis of them alone.

S6. Models are deductive devices and we fill the gap between the model world and the real world by making inductive inferences from the world of the model to the real world.

If a model is genuinely to tell us something, however limited, about the real world, it cannot be just a description of a self-contained imaginary world. And yet theoretical models in economics often are descriptions of self-contained and imaginary worlds.

S7. It is past time to shake off the old prejudice of Lord Kelvin, and embrace less formalism in doing economics. If this path is not chosen, the dismal science may lose by persisting in their 'physics envy' and cyclical recantations when some 'past masters' are needed to be rescued from the dustbin. That is to say, by not doing that a large part of economics may, in due course, be doomed to irrelevance.

7 instances: 4 appear in the beginning of the sentence and 3 come at the end.

230/13676 * 100 = 1.68%

Winter Edition: 3 articles

Article 1 (Discussion section only): Globalization, Financial Crisis and Contagion: Time - Dynamic Evidence from Financial Markets of Developing Countries

Asongu, S. A. (2012). Globalization, financial crisis and contagion: Time - dynamic evidence from financial markets of developing countries. *Journal of Advanced Studies in Finance*, 3(2), 131-139. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1282276441?accountid=16946>

Zero instances

Article 3 (Discussion section only): Analysis on Runs of Daily Returns in Istanbul Stock Exchange

Sensoy, A. (2012). Analysis on runs of daily returns in istanbul stock exchange. *Journal of Advanced Studies in Finance*, 3(2), 151-161. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1282276443?accountid=16946>

Zero instances

Article 5 (full text): Marx's Theory of Crisis in the Context of Financialization. Analytical Insights on the Current Crisis

Stravelakis, N. (2012). Marx's theory of crisis in the context of financialization. analytical insights on the current crisis. *Journal of Advanced Studies in Finance*, 3(2), 171-191. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1282276445?accountid=16946>

S1. We can associate the above text with Marx's argument that low profit rates are coupled (actually caused by) by a high organic composition of capital and theorize on the anticipated motion of some basic financial ratios. If the organic composition of capital is high then we can anticipate that the leverage ratio (capital advanced over equity) will also be high. Capital advanced will be increasing, «the productive powers of nature must be paid for», as Marx states.

S2. We can show further that if capital advanced equals to net debt plus equity multiplied by capacity utilization then a high leverage ratio implies a high debt to equity ratio. Therefore, a low rate of profit, associated with a high organic composition of capital, implies, especially in normal capacity utilization, higher absolute and relative debt needs.

S3. The lower the rate of profit, the greater the dependence of capital advanced on financial capital. However, if the mass of profit is sufficiently high, accumulated corporate savings will be sufficient to restore financial ratios to their previous levels, at least in part. Interest rates may rise

because of increased demand for debt but the money creation powers, of the banking sector, will be restored, by corporate capital released through capacity utilization adjustments.

S4. From the above we can also conclude that if the profit of enterprise is expected to turn stagnant in a crisis, a limit must exist, for the rate profit, beyond which the mass of profit becomes so low that the restoration of financial ratios is unfeasible. The demand for bank debt, to pay for the costs of production, is high and at the same time the supply of funds is low.

S5. Where ROA is: gross return on assets. If the rate of profit is constant any increase in ROA is preceded by an equal increase in capacity utilization. The relation implies that capacity utilization reacts on capital stock and the rate of growth of profitability as shown below.

S6. For a stable rate of growth, different from zero, capacity utilization will fluctuate around unity and the rate of growth of capacity utilization will gravitate around zero. If profit growth drops to zero then capacity utilization will take a minimum constant value well below unity. The last definition is the corporate share of gross profits:

S7. If the rate of profit of enterprise shrinks capital accumulation slows down, since industrial capitalists lack the profit incentive to take the risks of production. This may lead to a Marxian «possible crisis» of the first type (breakdown in the reconversion of commodities to money) because capital will remain in monetary form and commodities will pile up. But if capital exiting the production process is meant to repay existing debt or meet previous payments for which it falls short then a crisis of the second type, «the non- fulfillment of a whole senes of payments» (K. Marx 1861-3, part II ch. 11), may prevail.

S8. Extending this reasoning, if the debt / equity ratio is high, capacity utilization will remain relatively high because there is not enough equity, relative to debt, to back a sharp downsizing in production.

S9. For (p) greater than two (2) y turns positive and stagnation turns to growth, the motion is a two point stable cycle, if (p) becomes greater than 2.4873 the period doubles and a four point cycle prevails.

9 instances: all appear in the beginning of the sentence.

$$283/8695 * 100 = 3.25\%$$

Journal of Applied Finance and Banking (2012: Volume 2)

Issue 1:

Article 1 (Discussion only): What are the benefits of globally invested mutual funds? Evidence from statistical arbitrage models

Grobys, K. (2012). What are the benefits of globally invested mutual funds? evidence from statistical arbitrage models. *Journal of Applied Finance and Banking*, 2(1), 1-27. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1315885509?accountid=16946>

S1. Even though the spread of 10% p.a. is according to [1] stable and statistically significant out-of-sample, their trading strategy is not beneficial when accounting for trading costs. If average trading costs of 0.75% p.a. for each portfolio are taken into account, for instance (i.e. for rebalancing the long- and short-position), rebalancing 25 times a year⁶ (i.e. every 10 days) will result in trading costs of 18.75% p.a. and, as a consequence, the profit will become negative (i.e. -8.75% on average). The trading strategies suggested here, however, exhibit net-returns between 3.25%-11.70% while accounting for trading costs depending on the portfolio's turnover.

1 instance: appears in the beginning of the sentence.

$$53/968 * 100 = 5.48\%$$

Article 3 (Discussion only): Association between firm-specific characteristics and levels of disclosure of financial information of rural banks in the Ashanti region of Ghana

Zero instances

Issue 2:

Article 1 (Full Text): International Financial Reporting Standards (IFRS) and Its Influence on Pakistan

Rashid, H. A., Amin, F., & Farooqui, A. (2012). International financial reporting standards (IFRS) and its influence on pakistan. *Journal of Applied Finance and Banking*, 2(2), 1-13. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1321674101?accountid=16946>

S1. IFRS (International Financial Reporting Standard) are not cost effective, if executed for all types of entities. For different kinds of entities different standards should be there as in the case of SME (Small and Medium Enterprises) standards should be according to its level and area of expansion.

1 instance: appears at the end of the sentence.

$$16/2753 * 100 = 0.58\%$$

Article 3 (Discussion only): Transaction tax and market volatility: Evidence from the Taiwan futures market

Liau, Y., Wu, Y., & Hsu, H. (2012). Transaction tax and market volatility: Evidence from the taiwan futures market. *Journal of Applied Finance and Banking*, 2(2), 45-58. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1321674109?accountid=16946>

S1. Joint test: $2 \sum z_t = a + b_1 \sum St + b_2 \sum St \epsilon_{t-1} + b_3 (1 - St) \epsilon_{t-1} + \epsilon_t$ (iv) where z_t is squared standardized residuals and St is a dummy that takes the value of unity if $\epsilon_t < 0$ and zero otherwise. Asymmetric volatility tests are t-tests for coefficient b in (i), (ii), and (iii). The joint test is an F-test for regression (iv).

1 instance: appears at the end of the sentence.

30/901 * 100 = 3.33%

Issue 3:

Article 1 (Discussion only): Is weather important for US banking? A study of bank loan inefficiency

Apergis, N., Artikis, P., & Mamatzakis, E. (2012). Is weather important for US banking? A study of bank loan inefficiency. *Journal of Applied Finance and Banking*, 2(3), 1-38. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1321672647?accountid=16946>

Zero instances

Article 3 (Full text): Integral Equation Methods for Pricing Perpetual Bermudan Options*

Ma, J., & Luo, P. (2012). Integral equation methods for pricing perpetual Bermudan options*. *Journal of Applied Finance and Banking*, 2(3), 51-64. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1321672522?accountid=16946>

S1. From Table 1, if the early exercise boundary for Bermudan θ_B is replaced by that for American A_θ , then the computation of equations (7) can be avoided and the value function of Bermudan $V_{Ba}(S)$ can be obtained by computing equation (1). In this case and $\Delta T = 0.25$ (see the 2nd column of Table 1), the value of $V_{ba}(S)$ at $S_A = \theta$ is $V_{Ba}(\theta) = 15.0758$, while the true value of Bermudan at $S_A = \theta$ is $V_B(\theta) = 15.3397$. This means that such a replacement is acceptable.

S2. In the other case, if the early exercise policy for Bermudan is determined by solving equation (7) and the valuation of Bermudan is computed by formula for American (14), then the value of

Bermudan at $SB=0$ by formula (14) is $VA(0B)=12.8394$ and the true value of Bermudan is $VB(0B)=12.1108$ (see the 2nd column of Table 1).

2 instances: all appear in the beginning of the sentence.

92/1546 * 100 = 5.95%

Issue 4:

Article 1 (Discussion only): Further Analysis of Bank Efficiency Correlates: The Nigerian Experience

Oke, D. M., & Poloamina, I. D. (2012). Further analysis of bank efficiency correlates: The nigerian experience. *Journal of Applied Finance and Banking*, 2(4), 1-11. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1321672636?accountid=16946>

Zero instances

Article 3 (Full text): The Price Discovery of the Malaysian Crude Palm Oil Futures Markets

Rahman, N. M. N. A., Nawi, A. S., & Naziman, Y. H. N. M. (2012). The price discovery of the malaysian crude palm oil futures markets. *Journal of Applied Finance and Banking*, 2(4), 25-47. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1321672657?accountid=16946>

S1. If producers are in fact using futures prices as expected output prices when allocating resources, an assessment of the quality of the prices is important. Thus studies on the efficiency of futures markets have important implications on the issue of whether economics resources are being optimally allocated in the agricultural sector.

S2. The implication of these assumptions is that, over the long run, no trader would earn more than average profits irrespective of the position on trading rule used in the market. In other words, if the markets are efficient, commodity prices do not follow any systematic pattern that could be the basis for excess profits.

S3. A more fundamental problem, however, is that the validity of the hypothesis tests (i.e. $\alpha = 0$ and $\beta = 1$) may be seriously flawed if the time series data on which the tests are based are non-stationary. The possible non-stationarity behaviour of spot and futures price series raises doubts about the adequacy of conventional statistical procedures for inferential purposes.

S4. Following Engle and Granger (1987), a test for an equilibrium relationship between S_t and $F_{t-1,t}$ proceeds as follows: estimate (2) as the co-integrating or equilibrium regression, and check its least squares residual for stationarity using a unit roots test. If the residual is found to be stationary, the null hypothesis of no equilibrium relationship between S_t and $F_{t-1,t}$ is rejected.

S5. If they are found to be co-integrated, the restriction on the co-integrating parameters that $\alpha = 0$ and $\beta = 1$ is then tested under the condition of co-integrating using a likelihood ratio test.

S6. This term determines whether or not, and to what extent, the system of equation is co-integrated. The number of co-integrating vectors is determined by the rank of the π matrix. If the value of the matrix π is r , then there are r co-integrating relationships among the elements of Y_t .

S7. If the matrix π is full rank, then any linear combination of $t Y$ is stationary.

S8. If $\text{rank}(\pi) = 0$, the matrix π is null matrix then equation (11) collapse to the traditional VAR model with first differences.

S9. If ... i.e. the prediction using past X is more accurate than without using past X , in the mean squares error sense, we say that X causes Y , denoted by ...

S10. If ... and ... we say that feedback occurs, denoted by ...

S11. If ... then the two series are temporally unrelated and therefore they are independent of each other.

S12. However standard causality relationship suggested by Granger (1969) is only valid if the original series are not co-integrated. For the co-integrated series, any causal references derived from this standard test will be invalid.

S13. The argument lies under the proposition was, if the series are co-integrated, the relevant error correction mechanism (ECM) obtained from co-integrating regression must be included in the standard causality test to avoid the problem of misspecification (see Granger 1986).

S14. If there is one cointegrating factor in N endogenous variables, there should be one ECT. Each additional co-integrating factor contributes other additional ECTs.

S15. Let Y_t be a vector of n component time series, each time series are $I(0)$ after applying the differencing filter once, zero mean and purely nondeterministic stationary process. By the Granger Representation Theorem (E-G), if two or more series in Y_t are co-integrated of order r , then there exists r error correction representation. The restricted VAR enable us to have the following VECM formulation

S16. A consequence of the relationships described by (15) is that if the term ... is insignificant, Y_1 does not respond to differences from ... and Y_1 are considered exogenous within the system.

S17. Similarly, if ... is insignificant, Y_2 is exogenous. The error correction terms in this system give an additional channel of Granger-causality so far ignored by the standard causality test.

S18. If the constant c_n in each system is statistically insignificant, this implies that the process is not generated by a linear trend. The significance of estimable A 's indicating the short run granger causality between variables.

18 instances: 16 appear in the beginning of the sentence as opposed to 2.

432/6449 * 100 = 6.70%

Issue 5:

Article 1 (Discussion only): Financial liberalization (FL), environment variables and cost efficiency of Tunisian banking system

Anis, O., & Sami, R. (2012). Financial liberalization (FL), environment variables and cost efficiency of tunisian banking system. *Journal of Applied Finance and Banking*, 2(5), 1-25. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1321672655?accountid=16946>

S1. The average value indicates that banks produce with 0.053 of cost inefficiency. The average value of 0.053 means that the banks in our sample could have saved about 5.3% of total cost if they had used the best practice technology. We conclude that, the values of cost efficiency scores by ownership structure and by size; show that differences in efficiency levels between the different populations banking are very low (nearly non-existent).

S2. After introducing the environmental variables in the model, the average cost-efficiency scores by bank diminishes; and they vary between 38.51% (BNA) and 88.25% (BQT) instead of 91.11% (BNA) and 96.73% (ATB), with an average of 60.67% instead of 94.70%, indicating that the average bank in the sample could reduce its cost by 39.33% if it was to match its performance with the best-practice bank. Overall, the results show that average efficiency levels for Tunisian banks are lower than the results obtained without environmental variables.

2 instances: both appearing in the ending of the sentence.

$$89/1664 * 100 = 5.29\%$$

Article 3 (Discussion only): Are Sovereign Credit Ratings Objective? A Tale of Two Agencies

Zheng, L. (2012). Are sovereign credit ratings objective? A tale of two agencies. *Journal of Applied Finance and Banking*, 2(5), 43-61. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1321672651?accountid=16946>

Zero instances

Issue 6:

Article 1 (Full text): Credit Risk Analysis: Reflections on the Use of the Logit Model

Bartual, C., García, F., Giménez, V., & Romero-Civera, A. (2012). Credit risk analysis: Reflections on the use of the logit model. *Journal of Applied Finance and Banking*, 2(6), 1-13. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1318922416?accountid=16946>

- S1.** Evidently, it is highly probable that the result of the factor analysis will be influenced by the sample of companies used; if these companies are changed, the variables selected after the factor analysis will also vary.
- S2.** Xi being the independent variables (ratios) included in the model and the estimated coefficients for each of the ratios used. If this probability is equal to or greater than 0.5, the firm is classified as belonging to this subpopulation, and if not, it is placed in the first group (defaulted companies).
- S3.** It should be noted that this is caused because the insolvent firms are assigned to the second group (giving them a value of 1 and healthy firms a value of 0). If the coding of the dichotomous variable were to be modified, with insolvent firms in the first group (0) and solvent in the second (1), the signs of the coefficients would change, but not their values.
- S4.** Exp (β) indicates whether or not a variable influences the probability of default. In the variables in which this value is higher than 1, the influence is in proportion to the value; if the values are less than 1, the influence on the result is reduced.

4 instances: all four appearing in the beginning of the sentence.

$$115/3068 * 100 = 3.75\%$$

Article 3 (Discussion only): An Empirical Analysis of the Bond Market Behavior and Cointegration in the Selected APEC's Countries

Nguyen, C. V. (2012). An empirical analysis of the bond market behavior and cointegration in the selected APEC's countries. *Journal of Applied Finance and Banking*, 2(6), 31-39. Retrieved from <http://ezproxy.aus.edu/login?url=http://search.proquest.com/docview/1318922150?accountid=16946>.

Appendix 2

Journal of Advanced Studies in Finance	Beginning	End	Total
Summer			
Article 1	6	2	8
Article 3	11	0	11
Article 5	0	0	0
Article 7	4	3	7
Total: Summer	21	5	26
Winter			
Article 1	0	0	0
Article 3	0	0	0
Article 5	9	0	9

Total: Winter	9	0	9
Total: Journal	30	5	35

Table 2: Frequency and position of if-clauses in the JASF.

Journal of Applied Finance and Banking	Beginning	End	Total
Issue 1			
Article 1	1	0	1
Article 3	0	0	0
Total: Issue 1	1	0	1
Issue 2			
Article 1	0	1	1
Article 3	0	1	1
Total: Issue 2	0	2	2
Issue 3			
Article 1	0	0	0
Article 3	2	0	2
Total: Issue 3	2	0	2
Issue 4			
Article 1	0	0	0
Article 3	16	2	18
Total: Issue 4	16	2	18
Issue 5			
Article 1	0	2	2
Article 3	0	0	0

Total: Issue 5	0	2	2
Issue 6			
Article 1	4	0	4
Article 3	0	0	0
Total: Issue 6	4	0	4
Total: Journal			
	23	6	29

Table 3: Frequency and position of if-clauses in the JAFB.

Journal of Advanced Studies in Finance	
Summer	
Article 1	3.06%
Article 3	10.73%
Article 5	0.00%
Article 7	1.68%
Total: Summer	15.47%
Winter	
Article 1	0.00%
Article 3	0.00%
Article 5	3.25%
Total: Winter	3.25%
Total: Journal	18.72%

Table 4: Number of words per if-clauses

Journal of Applied Finance and Banking	
Issue 1	
Article 1	5.48%
Article 3	0.00%
Total: Issue 1	5.48%
Issue 2	
Article 1	0.58%
Article 3	3.33%
Total: Issue 2	3.91%
Issue 3	
Article 1	0.00%
Article 3	5.95%
Total: Issue 3	5.95%
Issue 4	
Article 1	0.00%
Article 3	6.70%
Total: Issue 4	6.70%
Issue 5	

Article 1	5.29%
Article 3	0.00%
Total: Issue 5	5.29%
Issue 6	
Article 1	3.75%
Article 3	0.00%
Total: Issue 6	3.75%
Total: Journal	31.08%

Table 5: Number of words per if-clauses