Information Content of Analysts' Report: A Literature Survey

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Abstract. The objective of this paper is to survey the literature on the information content of analyst report from three essential dimensions, namely, target price, earnings forecast and trading volume. The method employed is following the qualitative approach by reviewing and examining the past literature from the view of theoretical and empirical researchers. The initial result from existing literature, reveals that the research in analyst report mainly focused on empirical research rather than theoretical perspective. Secondly, there no clear consensus on the consistency of results regarding how well the information contents involving target price, earnings forecast and trading volume influencing the stock return. Thus, the views whether analyst report transmitting information to the investors still remain unambiguous when making an investment decision. This study is expected to enrich the existing literature in the area of analyst report and propose several areas for future researchers related to this topic.

Keywords: information content, analyst report, literature survey

Abstrak. Tujuan dari artikel ini ialah untuk melakukan penelusuran kepustakaan tentang isi informasi atas laporan analis dari tiga dimensi penting, yaitu, target price, forecast earning dan volume perdagangan. Metode yang digunakan adalah menggunakan pendekatan kualitatif dengan meninjau dan menguji berbagai literatur dari pandangan teoritis dan empiris. Hasil awal dari literatur yang ada, mengungkapkan bahwa penelitian dalam laporan analis terutama berfokus pada penelitian empiris daripada perspektif teoritis. Kedua, tidak ada konsensus yang jelas mengenai konsistensi hasil dalam hal seberapa baik isi informasi yang menyangkut harga target, perkiraan laba dan volume perdagangan mempengaruhi return saham. Dengan demikian, pandangan apakah laporan analis mentransmisikan informasi kepada investor masih tetap tidak ambigu saat membuat keputusan investasi. Penelitian ini diharapkan dapat memperkaya literatur yang ada di bidang laporan analis dan mengusulkan beberapa bidang untuk penelitian masa depan terkait dengan topik ini

Kata Kunci: isi informasi, laporan analisis, survei literatur

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Introduction

In promoting the market efficiency in terms of information disclosure, the role of financial seem to be highly significant. The disclosure of information made by financial analyst tend to help various market players such as retail and institutional investors, government etc. in assessing the information related to the company. In the common term, financial analyst usually will come out with the analyst report that contain various informations especially from financial perspective of the company. At the end of the analysis, analyst will recommend to the investors whether to buy, hold or sell the shares. (Baule and Wilke, 2004; Haely and Palepu, 2003). By disclosing full information disclosure via analyst report, it helps in speeding up the process of informational efficiency and also assist investors to figure out and prioritise the information that significantly influencing the stock price. Not only that, full disclosure of information will lead to identification of company progression in different time horizon.

The evidence from existing literatures revealed that the research on analyst report is one of the top research areas in the field of finance. Various empirical investigations have been performed to capture the information efficiency in the analyst report such as but not limited to Ryan and Taffler (2006); Altinkilic and Hansen (2009) and the latest study from Gerritsen and Lotter (2014). All these study looking into the effect of information towards the share price before and after the discovery of new information by employing the robust methodology called the "Event Study". Another important area that received much attention from the researcher is that the information content in the analyts report. The information content is widely known as the changes in stock price due to influx of new information which may impact the firms stock price to increase or decrease. So, the information disclosed in the report would have significantly influence over the stock price reflecting the degree of information power. However, this depend on the attitude of the information whether it is positive or negative informations.

Furthermore, it is also noted that the stock prices tend to respond to the new information when the information is released in the market and the day after the revision has taken place (Jegadeesh and Kim, 2006). This discovery seems to be consistent with the extant literature where the analyst reports have significant information that associate with the share price and benefits the investors. However, some literatures argue that analyst reports are not comprehensive enough to justify why investors should invest or vice versa in any particular shares. This is due to some issues of biasness and data manipulation (Agarwal and Chen, 2008). A theoretical paper by Morgan and Stocken (2003) also investigates and measures the element of biasness related to financial incentives obtained by analysts. The study's shows that a higher incentive given by an analyst firm causes the analyst to release favourable news regarding the company, and subsequently results in investors buying the company's stock.

Closer inspection of the empirical literature makes noticeable that one of the major questions which studies have often posed is to what degree analysts are able to accomplish their role as market intermediaries and in supplying all information related to firms to the

investors. This matter remains unambiguous and vigorously discussed and debated among scholars in the field. Given this, it will be fascinating to identify what are interesting findings postulated by existing studies when it comes the analyst report.

Therefore, this research aims to specifically look researches that have been carried in the field of analyst report. The focus area would be the information content in the report. To get clearer picture on the information content of analyst report, this study will zoom into the discussion of literature from both theoretical and empirical perspectives. This study claims two novel contributions, firstly, this study is expected to address the research gaps and enrich the existing literature on the information content and analyst report. Secondly, this research will unclutter various ideas on the future research that can be carry out in this field of research.

This study is structured as follows. Section 2 illustrate on the theoretical aspect of analyst report. In the following section which is Section 3 reveals on the existing literatures on the information content of analyst report by looking into three main information content, namely: target price, earnings forecast, and trading volume. Section 4 will look into the conclusion and suggestions for the future research for futher exploration in the future by researchers.

Method

This paper is an attempt to present a review of analyst report and information content research, published or unpublished, from various sources such as academic research journals, websites, and electronic databases between 1972 and 2015. Furthermore, it can be considered here that the author's publications, working paper and papers presented in the conferences also comprise significant material on analyst report and information content. In addition to the journal paper, the present study also includes the working paper and doctorate dissertation as they provide very useful information to the researchers or practitioners. But, the refereed academic research journals epitomize the premier level of research in this paper. Most of refereed journals are published in Social Sciences Citation Index (SSCI) and Scopus indexed journals. By considering relevance of study and consideration of time period for present study, a total of 81 research papers related to analyst report were obtained. At initial stage, there were more than 100 research paper were obtained, however, many paper which made relevance to analyst report but did not have information content as the primary research topic. Thus, the final set of 81 research papers are used. From the extracted papers, one common idea can be noticed is that majority of researches focused on the three important dimension of information content which are target price, earnings forecast and trading volume. Therefore, as per shown in Figure 1, this research will focus on these three aspects.

Target Price

Earnings Forecast

Information
Content

Trading Volume

Figure 1: Information Content of Target Price, Earning Forecast and Trading Volume

Note: This figure shows the research framework used in this research. There are three information contents used in this research and the selection of variables are based on literature evidence.

Result and Discussion

Analyst report in a common term disclosed various information pertaining to the company progression at presently and future outlooks. According to the research done by Farooq (2008), an analyst report consists of the following information: First, detailed description of a company's financial highlights based on financial indicators. Second, the justification behind why analyst think the company will success or fail. Third, from analysis, analyst will come out with the decision of whether to buying, selling or holding the shares. Further explanation on the taxonomy of analyst report is given in Figure 2.

In a usual case, as per revealed by Figure 3, analyst analysed the firm stock using the top-down approach. The top – down approach is called as the process where the analyst will be analysing the economy situation followed by industries and the finally will recommend the companies to the investors whether to invest or not. Furthermore, the way of analysing the company by analyst is also can be varies depending on the types of analysis used by the analyst. The common procedures are that there are two types of analyst analysis, firstly the analyst that considered as firm believer tend to follow the bottom – up analysis whereas the industry analyst focuses on the top-down approach.

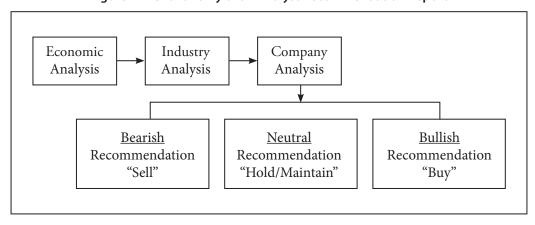


Figure 2 The Taxonomy of an Analyst Recommendation Report

Note: The figure shows the basic procedures taken by an analysi in analysing the stocks. The procedure starts from economic analysis, then industry analysis and finally focuses on the company analysis. From the analysis, the analyst will come out final decision whether to buy, sell or hold the shares.

According to the Bradshaw et al. (2012), the firm analyst basically will look into the context of analysing the company fundamental information in terms of cash flows, assets and liabilities management of the companies and the capital structure. Together with fundamental information, analysts are also tending to covers on the industry competitiveness and economic business cycle trends to justify the recommendation more comprehensively. Case in hold, the industry analysts emphasize on macroeconomic factors that influencing the stock prices and less emphasis given to the fundamental analysis. The Figure 3 shows the rudimentary information analysed by the firm and industry analysts.

Fernandez (2001) argued that the information disclosed by the analyst are contemplated as "life blood" to the market players especially in making investment decision. Moreover, by disclosing full information, it is believed that it tends to reduce the issue of asymmetric information that haunts all investors in the market (Amir and Sougiannis, 1999; Fang and Yasuda, 2013). In the different context, Bhushan (1989) highlights some of the popular information processed by the analyst when recommending shares to the investors. The informations are not limited to the ownership structure of the company, quality of shareholders, company size, historical movement of stock prices and many others. Although all these informations usually used by the analyst, Bushan argued that it is only to serve for the public reference when making investment decision. However, it is not for the reference of those who attached with the company such as the stakeholders. The stakeholders seem to have more accessing to the information relating to the company instead of general public. As a concluding remarks for the theoretical evidence, not much studies have been carried out in the context of theoretical analysis rather majority of research available are from empirical perspectives.

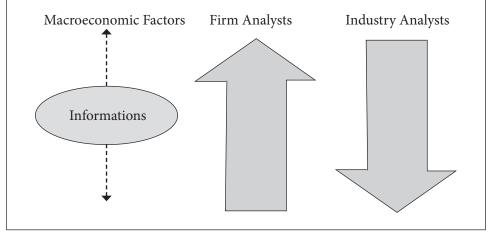


Figure 3. Differences between Firm Analysts and Industry Analysts

Note: This figure reveals the types of analysis performed by two different analysts in the market. First is the analyst who believes in the bottom up approach whereas the other one is the industry analyst who believed in the top down approach.

The empirical evidence of information content in the analyst report mainly evidenced in the existing literatures comes from target price, earnings forecast and trading volume. Thus, this section will reveal the literatures on the information content of target price,

earnings forecast and trading volume. The literature evidence on the information content of target price had been explicitly discussed in the existing works. It also can be seen from the chronological orders. Groth (1979) shows an evidence with regard to the evidence of information content of target price. The study by Groth's postulates that with the positive target price, the stock return tends to hold at least for six-month and after the postrecommendation period, the return back to normal equilibrium. To confirm further, Groth et al. (1979) did another study using the target price as a main variables found that the abnormal return did happen after adjusted for the transaction costs and the level of risks. To see effect of information content of target price with other variables such as revision upgrade and downgrade, trading volume, Elton et al. (1984) did a research to investigate the changes in information content and how does it affect the stock return. The authors use beta to seize the robustness together with information content variables as stated earlier. As of positive revision, stock price tends to higher and realises higher return with good drifts. After two months of realising the return, the movement of return seem to be low and encounter losses. Thus, it can be noted that if the information content involved positive upgrades, then the chances to encounter return would be possible and vice versa.

Another study that dealings with target price is done by Asquith et al. (2005). In this paper, they are trying to investigate the correlation movement of abnormal return and target price by basing the time – framework of one year. The study concludes that the target price accuracy is about 54.28 percent. The positive target price expected to increase the share price about 37.27 percent and negative target price lead to minimum share price of 15.62 percent. Similar to Asquith et al. (2005), Bradshaw et al. (2012) highlights that the expected return from the target price is larger compared with realised stock price. The percentage change in return for the target price is about 35 percent more than the actual stock return. The minimum range of return for the target price is 24 percent given the time framework of one year.

Furthermore, in the another highly cited paper in the field of information content was carried out by Womack (1996). This paper specifically dealings with the price drift due to recommendation period and after post-recommendation. The author found the price drift seem to be positive and strong when the recommendation together with the target price are positive. Given the positive information in term of recommendation, the price drift last for at least six months. This view is also consistent with the majority of literatures where argued that investors will buy the stock given there were positive and good recommendation (Guaglino et al. 2013; Da and Schaumburg, 2011).

Furthermore, the significant of target price is also highlighted by Jegadeesh and Kim (2006) where the authors attempt to investigate the relevance of target price in the context of G7 countries. The finding revealed that except for Italy, the target price and its relationship with the abnormal return are significant, thus supporting the view where the target price can be considered as good information content in the analyst report. The result is also postulates that particularly the relevance of target price quite high when it comes to United States and the effect remain even after the revision period. Although the Jegadeesh and Kim study portray that the target price is significant in United States, but Cao and Kohlbeck (2011)

argued in the opposite way but in favour to the United States.

The study by Cao and Kohlbeck basically aim to investigate the quality of analyst, the element of biasness and the market participant reaction towards the analyst report information announcements in United States. The outcome of study shows that there was less effect of asymmetric information in the analyst report which subsequently do not affect the quality of target price derivation. When there is less effect to the analyst quality, then the element of biasness is not much robust and the market participant confidence is also relatively high. Case in hold, Kliger and Kudryavtsey (2010) also highlighted that usually the abnormal return is higher when there is positive upgrade as the risk of volatility is lower in United States.

Following Jegadeesh and Kim's, Kerl (2011) attempted to look at the accuracy of target price by zooming into sectorial analysis and the target market was based on German. The research covers the time framework from 2002 until 2004. The finding shows that the relationship between target price and industry specific factors are not significant, however the target price found to be statistically significant with informativeness of analyst report such as company size and reputation. However, this view is contradicting with Boni and Womack (2006) where the authors stating that analyst report that focused on the industry level analysis tend to encounter abnormal return of 1.23 percent and it is strongly significant. Furthermore, the author also analyse the industry effect by looking into monthly basis return performance, and found that analyst recommendation works well if the analyst concentrate their analysis into industry level rather than categorize into firms under winner and losing categories. In addition, Brav and Lehavy (2003) also documents that the target price able to explain short-term and long-term stock return. Together with target price, the target price revision is also seem to have strong impact to the movement of stock price.

Although the above literatures argued the positive impact of target price towards the stock return movement, but there are other literatures argued in an opposite and put a strong argument where the target price may not be considered as good information content in the analyst report. For example, in the study performed by the Da Silva (2013), the result postulate that target price as well as earnings per share do no really contain any significant information and not influencing the share return, thus it has less predictive lower. This view is also in –line with the Bradshaw and Brown (2012) but in different perspective where the author portrays that one of the reason caused low predictive power is perhaps due to lack of skills attached with the analyst. This might affect the derivation of the target price, then lead to different outcome where the target price might be differing from the stock price.

In the study by Gleason and Mills (2008), argued that the target price accuracy seems to have less power in explaining the return behaviour about 46 percent. This finding was made by analysing the methodology applied by the analyst in deriving the recommendation together with the capital gains. The similar view is also shared by Fontaine and Roger (2014). Similarly, Bonini et al. (2010), the study highlighted that the target price incrementally inaccurate for the large firms, loss making company and the company that get heavy momentum. Furthermore, Asquith et al. (2005) also argued that the other variable tend to have more predictive power such as the analyst strength in terms analysis, market and management

information compared with the target price. For this part, most of the literatures, in favour to the target price where it can be considered as a wise information content in the analyst report.

The literatures on earnings forecast have also explicitly discussed in the existing studies. One of the recent studies that dealings with the earnings forecast is Hou et al. (2014). In this paper, the author attempt to investigate the relationship among the earnings forecast revision, information volatility and capital gain whenever the revision taken place in earnings forecast. The time horizon used are from 1992 till 2009 with the sample size of 711 active stock traded in the Australian Stock Exchange. The findings revealed that the stock price tend to increase when the earnings revision is positive while tend to drop in the case of negative revisions. The similar outcome is also postulated by the Fama (1984) and Ali et al. (1992). Furthermore, the study is also shows that the investors reaction seems to be high to the under-reaction public information such as the one that related to the analyst earnings prediction revision. The study is also reveals that there is clear violation of the Efficient Market Hypothesis (EMH) as the investor do not just rely on the earnings forecast rather they look into other information that can influencing the share return. The similar findings are also consistent with Baule and Wilke (2004), Miwa and Ueda (2014), and Li and Ding (2008).

In a usual practice, analysts come out with accurate earnings forecast when the stock has bright outlooks (Ertimur, 2007). In some circumstances, the technique applied in deriving the earnings forecast by analyst is also having connection with recommendation. For instance, based on earnings forecast, the strategy would be a long strategy for good and favourable stock whereas short strategy for underperforming stock. This strategy found to be significant statistically and encounter return of 0.737 percent. This result is also in-line with Loh and Mian (2006) and Carhart (1997). Moreover, these studies illustrate the earnings forecast accuracy that fall under the category of low quintile generally resulted -0.529 percent and it is insignificant. On another perspective, high accurate earnings forecast subject to less quintile of 1.27 percent per month. The paper concludes that analyst report is really benefits to the investors who rely on the information content and earnings forecast made by an analyst. This observation is also consistent with Jiang et al. (2014) by looking into China's stock market where the authors attempt to investigate the information content of recommendation revision by using the OLS. The outcome remains same with the above studies. Apparently, Ekaputra et al. (2013) argued in the different perspective where although the upgrade or downgrade of target price influencing the stock price but the client which is the investors do not place high importance to the earning forecast. The similar finding also postulate by the Bjerring et al. (1983). Thus this has led to further puzzling whether the earnings forecast is really containing the information content.

In different view, the accuracy of information content of earnings forecast is somehow attached with analysts' characteristics (Clement and Tse, 2003). The study Clement and Tse backing the idea where analyst fail to understand the analectic characteristics that would have significant impact. In the study carried out by Byard et al. (2011) argued that analyst in general tend to underestimate the firm earnings and difficult to decide the stock shall be included in the lists of recommendation or not. Employing 100 hot-growth companies and quarterly earnings from 1985 till 2006, the study concludes that the analyst recommendation

taking into all aspect of the stock prospect and the valuation part in tracking the price of stock. Similar to Byard et al. (2011), Ding et al. (2004) mentioned that analyst forecast would be higher when there is positive earnings growth. But, it is excessively optimistic when negative earnings growth. A similar outcome also cited in the study by Brown and Kennelly (1972). Even though these two studies show similarities but Hillary and Shon (2007) illustrate that the earnings forecast found to be weak during the release day of analyst report. This is true for the sell recommendation due to market sentimental issues. This finding is consistent with Fried and Givoly (1982), and Lui (1993).

The results by Byard et al. (2011) objected by Hall and Tacon (2010) where the finding reveals that the analyst report postulates higher level of earnings accuracy in different stages of environment and becomes the profitable recommendation. But this subject to the certain restriction in which the analyst seems to be predisposed in proposing stock that have higher price with good momentum and low book value. This has subsequently leaded to biasness in choosing the profitable recommendation. This result was made based on Australian context using the calendar time series data and employing the R-Square analysis as a main source of analysis. In a different perspective, Lys and Sohn (1990) contend that earnings forecast are comprehensive and informative if there is good corporate accounting disclosure. The discovery made by Lys and Sohn disclose that earning forecast represented 66 percent of information attached in the stock price during the release date of earnings forecast.

Comparatively, Loh and Stulz (2011) highlighting that employing complex measurement in calculating earnings forecast resulted in inaccuracy of earnings and fail to capture information content prior to changes in price. Furthermore, Clarke et al. (2007) postulates that earnings forecast did not work well in forecasting the performance of firm during the bankruptcy period. This conclusion was made based on US market using the sample size of 384 firms. Differently, Chang et al. (2008) said unfavourable earnings forecast tend to more robustness compare favourable earnings forecast. Furthermore, Chang et al's argued that investors tend to placed more importance to the information disclosure that comes from independent sources as it is more convincing.

Although the study by Loh and Stulz's, Clarke et al.'s and Chang et al.'s shows in favour results for earnings forecast but Khalik and Ajinkya (1982) finding object the results made by above studies. Employing 288 analyst reports produce by Merrill and Lynch analyst experts and zoom in into earnings forecast, the authors proved that there was a significant influence over the return given the changes in earnings forecast during the period of 1977 until 1978. Similarly, in the studies by Lin and McNichols (1995) and Stickel (1995) found that earnings forecast contain good information content and receive higher importance among the investors when making investment decision as it signal firm prosperity in present and future, thus subsequently lead to abnormal return.

There are uncertainties involved when it involved earnings forecast. For example, Conroy et al. (1993) aims to analysed the accuracy of earnings forecast generated by the analyst in both countries, United States (US) and Japanese. The outcome of the study revealed that US analysts are better in enhancing the accuracy of earnings forecast. This perhaps resulted due to the fact where differences in abilities in analysing stocks. The same argument also made by Walther and Willis (2013). The study by Francis and Soffer's (1997)

looks into different viewpoint at the analyst ratings and earnings forecast errors involved in the report. The finding postulates that information on rating and earning forecast errors have influence over the return. The positive rating information resulted in abnormal return whereas earnings forecast errors tend to higher especially during the short—term horizon. This is in line with the results made by Biglari et al. (2013) and Devos et al. (2007) with regard to forecast errors and earnings forecast.

On the other hand, Booth et al. (2014) aim to document whether analyst lead the herd in the stock recommendations. The study employs the panel regression and used quarter calendar time-series data covering from 1999 till 2001. Majority of notes in the analyts report mainly focuses on the sell-side analyst. The results suggest there is strong justification for stock price movement towards the analyst notes although after control for some variables such as earnings forecast announcement, conference call and external informations. In addition, Welch (2000), Jegadeesh and Kim (2006), McNichols and O'Brien (1997) also postulates the similar outcome where the price changes are significant when there is changes in existing information in the report. Usually, it will have resulted in abnormal return and the price deviation is also close enough. Differently, Finger and Landsman (2003) reveal that optimistic abnormal return generally results in higher mean of earnings forecast error and earnings forecast revision, and forecasted earnings to price ratio. Following Finger and Landsman (2003), Francis et al. (2002) disagree to the Finger and Landsman where there is no evidence to support whether investors' reaction and responsiveness, and earnings announcement negatively associate to one another. However, Lys and Sohn (1990) argue that even though earnings forecasts appear to be relevant, the authors conclude that this may be reflective in some cases but not for all environment. As a concluding remark for this section, the information content of earnings forecast received mixed views and opinions in the past and present literatures. Thus, it has led to unambiguous understanding whether the earnings forecast reflect the information content in the report or not.

The literatures on trading volume as an information content is also widely being researched by many past researches. One of the prominent literatures that dealings with trading volume was researched by Kim and Verrecchia (1991). The finding shows that the investors expectation on the stock price escalate the trading volume of the shares. In addition, the author also revealed that there is statistical relationship between the trading volume and stock price. Generally, there is no specific theory that dealing with the concept of trading volume unlike for the assets pricing, there are various theory to explain the concept. Therefore, it is important to known to what extent the information content of trading volume influence the return.

Karpoff (1986) came out with three justifications why the trading volume can be considered as important information content. Firstly, it is because of attitude of the investors in treating the trading volume. Some investors are classified as the homogeneous investors and the way they read information will be different. The second reason would be the unambiguous conclusion on the trading volume such to what extent the information readily available influence the stock price. Some informations are easily reflected by the trading volume and some are not. Finally, there is no clear conclusion with regard to the trading

volume because the impact of trading volume will be lower in imperfect market and will be stagnant depending on the type of markets.

The initial study on the trading volume as an information content was initiated by the Beaver in 1968. According to the Beavers' the trading volume contain the element of significant information. By definition, information content of trading volume is called as the changes in expectation due to certain event, subsequently lead to changes in stock prices. If the event is positive, then the impact would be increasing the trading volume and vice versa. Therefore, its subject to scenario or event that embodies positive and negative informations which will allow the investors change the investment size or the strategy, thus lead to changes in the volume.

The importance of this variable is also investigated by Kim and Verrecchia (1991b) and found that there is existence of strong association between information and trading volume especially to the public announcement. Let say, the public information is positive, and then the investors will decide based on the information and make a speculative move using their own analysis together with fundamental information. All in all, it will change the trading volume. This view is also consistent Landsman and Maydew (2002) and Coval and Stafford (2007) argued that there is no clear evidence on basis how the earnings announcement influences the stock price but when it involves the trading volume, the impact is robust and significant. Similar outcome also postulated by the Conrad and Niden (1992); Kerl and Walter (2008).

The recent investigation by Savor (2012) portrayed the positive association between trading volume and price drift. Together with other variable such as firm size, it is found that the trading volume seems to be more powerful in explaining the stock return behaviour during the period of 1995 till 2009. The study makes a concluding remark where the investors normally respond less to the fundamental news but responsiveness is higher for non-fundamental information. Case in hold, same viewpoint with Savor (2012), Jegadeesh et al. (2004) claim that analyst tend to recommend glamorous stocks, with higher growth rate, good momentum together with higher trading volume.

Furthermore, the study by Li (2005) that investigate whether the analyst recommendation able to improve the picking ability of investor for the investment purpose. Utilizing calendar time-series data, Li divulge stock with positive upgrade in the report tend to receive high attention from the investor as they will realize abnormal return. Apart from positive upgrade, the other information content such as trading volume, book market ratio, and market momentum are also in favour position. This result is consistent with the Brown et al. (2013) where the trading volume will have an impact on short term as well as long term on the stock prices.

The most recent study by Devos et al. (2015) hypothesise that the stocks that have low R-Square tend to encounter higher price responsiveness, higher trading volume and large differences in terms of bid-ask spread in the analyst report. The impact seems to be marginal for the small firms compared with large firms. This study was investigated based on the event study approach to capture how the stock return synchronicity related to the information

content in the analyst report. Chan and Fong (1996) argued that in the case of Hong Kong market, the analyst report highly demanded by the investors due to its informativeness that later cause the trading volume that particular stock increases.

Based on the selected literatures above, majority of literatures claims that trading volume is good information content in the analyst report. But Karpoff (1986) viewpoints different compared to the above studies. According to the Karpoff, the impact of trading volume still remains unequivocal given the different interpretation by the investors. For example, if the investor has high expectation to the certain information that available in the market, then it will push up the trading volume. But it may not necessarily true because the trading volume is also be able to decrease although the information is positive and favourable due to wrong interpretation and investors perception. In the study by Campbell et al. (1993) finding consistent with Karpoff but slide differences. Employing GARCH analysis, Campbell et al. shows that increment in trading volume lead to lower return whereas decrement in trading increases the stock return. Furthermore, the research carried out by Cooper et al. (2001), conducting using the normal regression analysis found that the trading volume and earnings forecast have less impact to the stock return and powerless in explaining stock price movement. Looking at the evidence above for the trading volume, it can be seen that the decision relating to the trading volume remains unambiguous since there are conflicting results in the existing literatures.

Conclusion

The study intends to review the existing literatures on the information content of analyst report by focusing on the target price, earnings forecast and trading volume. The chosen articles are categorized into two aspects, one is on the researches that discussed about theoretical perspective of analyst in general such as the importance of analyst report and how do they (analyst) recommend the shares, the processes involved. Secondly, the reviews are focused on the empirical evidence on the target price, earnings forecast and trading volume. From these two aspect, the following inferences can be made. The first conclusion is that not many literatures that explicitly discusses about the information content in analyst report from theoretical point of view. This imply that more research needed in context of theoretical evidence of analyst report. Secondly, in terms of empirical evidence of target price, earnings forecast and trading volume revealed there is no consistency in the results. It means there is no clear consensus to what degree all those three informations content really contain good information that can influencing the stock price movement. Looking at this view, it brings more question than answer, subsequently lead to mixed opinion with regard to the information content of analyst report. Policy implication of this study could be in the form of offering current and gaps for future research in the context of analyst report. By offering various research topic in this field, it would help in answering the question with regard to how well the analyst report helps in decision making process made by the investors.

The suggestion for future researches or called as research gaps in this field based on reviewing the existing literatures above are firstly, the future research should focus on the

different classification of firms with the information content to see how the information content affecting the movement of stock price. The classification of firms can be seen from the risk – profile of the firms, firm age, and industries level, secondly, in future, the research also can concentrate on the accuracy of target price accuracy and earnings forecast errors in detecting the degree of robustness of information content. Thirdly, the upcoming research is also can look at the qualitative dimension of analyst report information content as the stock price is also affected by the non-quantitative factors that affecting the stock price. Apparently, the forthcoming research is also can focus on how comprehensive is the analyst report in terms of information disclosure. Moreover, the future study is also can zoom in into the economic factors in influencing the return of the stocks.

References

- Abdel-Khalik, A. R., & Ajinkya, B. B. (1982). Returns to Informational Advantages: The Case of Analysts' Forecast Revisions. *Accounting Review*. Vol. 57: 661-680.
- Agarwal, A., & Chen, M. A. (2008). Do analyst conflicts matter? Evidence from stock recommendations. *Journal of Law and Economics*. Vol. 51(3): 503-537.
- Ali, A., Klein, A., & Rosenfeld, J. (1992). Analysts' Use of Information About Permanent and Transitory Earnings Components in Forecasting Annual EPS. *Accounting Review*. Vol. 67: 183-198.
- Altınkılıç, O., & Hansen, R.S. (2009). On the Information Role of Stock Recommendation Revisions. *Journal of Accounting and Economics*. Vol. 48(1): 17-36.
- Amir, E., & Sougiannis, T. (1999). Analysts' Interpretation and Investors' Valuation of Tax Carry forwards. *Contemporary Accounting Research*. Vol. 16(1): 1-33.
- Asquith, P., Mikhail, M. B., & Au, A. S. (2005). Information Content of Equity Analyst Reports. *Journal of Financial Economics*. Vol. 75(2): 245-282.
- Baule, R., & Wilke, H. (2014). The Information Content of Analyst forecasts—An Econometric Analysis of Informational Leadership. *Working Paper*. Retrieved from: https://www.semanticscholar.org/paper/The-Information-Content-of-Analyst Fore castsAn-E-Baule-Wilke/f47c5c 41658c60aac35679d73b809dc39a76143e
- Beaver, W. H. (1968). The Information Content of Annual Earnings Announcements. *Journal of Accounting Research*. Vol. 6: 67-92.
- Bhushan, R. (1989). Firm Characteristics and Analyst Following. *Journal of Accounting and Economics*. Vol. 11: 255-274.
- Bjerring, J. H., Lakonishok, J., & Vermaelen, T. (1983). Stock Prices and Financial Analysts' Recommendations. *The Journal of Finance*. Vol. 38(1): 187-204.
- Biglari, V., Alfan, E. B., Ahmad, R. B., & Hajian, N. (2013). The Ability of Analysts' Recommendations to Predict Optimistic and Pessimistic Forecasts. *PloS one*. Vol. 8(10): 73-85.
- Boni, L., & Womack, K. L. (2006). Analysts, Industries, and Price Momentum. *Journal of Financial and Quantitative Analysis*. Vol. 41(1): 85-109.

- Bonini, S., Zanetti, L., Bianchini, R., & Salvi, A. (2010). Target Price Accuracy in Equity Research. *Journal of Business Finance & Accounting*. Vol. 37(9): 1177-1217.
- Booth, L., Chang, B., & Zhou, J. (2014). Which Analysts Lead The Herd in Stock Recommendations? *Journal of Accounting, Auditing and Finance*. Vol 29(4): 464–491.
- Bradshaw, M. T., Brown, L. D., & Huang, K. (2012). Do Sell-side Analysts Exhibit Differential Target Price Forecasting Ability? *Review of Accounting Studies*. Vol. 18(4): 930-955.
- Brav, A., & Lehavy, R. (2003). An Empirical Analysis of Analyst' Target Prices: Short-Term Informativeness and Long-Term Dynamics. *The Journal of Finance*. Vol. 58 (5): 1933-1968.
- Brown, P., & Kennelly, J. W. (1972). The Informational Content of Quarterly Earnings: An Extension and Some Further Evidence. *The Journal of Business*. Vol. 45(3): 403-415.
- Brown, N. C., Wei, K. D., & Wermers, R. (2013). Analyst Recommendations, Mutual Fund Herding, and Overreaction in Stock Prices. *Management Science*. Vol. 60(1): 1-20.
- Byard, D., Li, Y., & Yu, Y. (2011). The Effect of Mandatory IFRS Adoption on Financial Analysts' Information Environment. *Journal of Accounting Research*. Vol. 49(1): 69-96.
- Campbell, J. Y., Grossman, S. J., & Wang, J. (1993). Trading Volume and Serial Correlation in Stock Returns. *The Quarterly Journal of Economics*. Vol. 108(4): 905-939.
- Cao, J., & Kohlbeck, M. (2011). Analyst Quality, Optimistic Bias, and Reactions to Major News. *Journal of Accounting, Auditing and Finance*. Vol. 26(3): 502-526.
- Carhart, M. (1997). On Persistence in Mutual Fund Performance. *The Journal of Finance*. Vol. 52: 57–82.
- Chang, M., Ng, J., & Yu, K. (2008). The Influence of Analyst and Management Forecasts on Investor Decision Making: An Experimental Approach. *Australian Journal of Management*. Vol. 33(1): 47-67.
- Chan, S.Y., & Fing, W.M. (1996). Reactions of the Hong Kong Stock Market to The Publication of Second Hand Analysts' Recommendation Information. *Journal of Business, Finance, and Accounting.* Vol. 23 (8): 1121-1140.
- Clarke, J., Khorana, A., Patel, A., & Rau, P. R. (2007). The Impact of All-star Analyst Job Changes on Their Coverage Choices and Investment Banking Deal Flow. *Journal of Financial Economics*. Vol. 84(3): 713-737.
- Clement, M. B., & Tse, S. Y. (2003). Do Investors Respond to Analysts' Forecast Revisions as if Forecast Accuracy is All That Matters? *The Accounting Review*. Vol. 78(1): 227-249.
- Cooper, R. A., Day, T. E., & Lewis, C. M. (2001). Following The Leader: a Study of Individual Analysts' Earnings Forecasts. *Journal of Financial Economics*. Vol. 61(3): 383-416.
- Conrad, J., & Niden, C. M. (1992). Order Flow, Trading Costs and Corporate Acquisition Announcements. *Financial Management*. Vol. 21: 22-31.
- Conroy, R., Harris, R. S., and Park, Y. S. (1993). Published Analysts' Earnings Forecasts in Japan: How Accurate are They?. *Pacific-Basin Finance Journal*. Vol. 1(2): 127-137.

- Coval, J., & Stafford, E. (2007). Asset Fire Sales (and Purchases) in Equity Markets. *Journal of Financial Economics*. Vol. 86(2): 479-512.
- Da Silva, P.P. (2013). The Information Content of Analyst's Price Targets and Recommendations on Stocks Prices Evidence for the Portuguese Market. *Working Paper.* Retrieved from: https://www.researchgate.net/publication/234035907_ The_information_content_of_analyst%27s_price_targets_and_recommendations_on_stocks_prices_-_Evidence_for_the_Portuguese_market
- Da, Z., & Schaumburg, E. (2011). Relative Valuation and Analyst Target Price Forecasts. *Journal of Financial Markets*. Vol. 14(1): 161-192.
- Devos, E., Hao, W., Prevost, A. K., & Wongchoti, U. (2015). Stock Return Synchronicity and The Market Response to Analyst Recommendation Revisions. *Journal of Banking & Finance*. Vol. 58: 376-389.
- Devos, E., Ong, S. E., & Spieler, A. C. (2007). Analyst Activity and Firm Value: Evidence From The REIT Sector. *The Journal of Real Estate Finance and Economics*. Vol. 35(3): 333-356.
- Ding, D. K., Charoenwong, C., & Seetoh, R. (2004). Prospect Theory, Analyst Forecasts, and Stock Returns. *Journal of Multinational Financial Management*. Vol. 14(4): 425-442.
- Ekaputra., I.A., Susilawati, E.C. & Utama, C.A. (2013). Contribution of Sell Side Equity Analyst Reports to Client's Return and Stock Price Efficiency: Indonesia Stock Market Evidence. *Jurnal Pengurusan*. Vol. 37: 25-32.
- Elton, E., M. Gruber & M. Gultekin. (1984). Professional expectations: Accuracy and diagnosis of errors. *Working Paper*. New York: New York University.
- Ertimur, Y., Sunder, J., & Sunder, S. V. (2007). Measure for Measure: The Relation Between Forecast Accuracy and Recommendation Profitability of Analysts. *Journal of Accounting Research*. Vol. 45(3): 567-606.
- Fang, L. H., & Yasuda, A. (2013). Are Stars' Opinions Worth More? The Relation Between Analyst Reputation and Recommendation Values. *Journal of Financial Services Research*. Vol. 46(3): 235-269.
- Farooq, O. (2008). Financial Crisis and Performance of Analysts' Recommendations. *Working Paper.* Swedish School of Economics and Business Administration.
- Fama, E. F. (1984). Forward and Spot Exchange Rates. *Journal of Monetary Economics*. Vol. 14(3): 319-338.
- Fernandez, F. A. (2001). The Role and Responsibilities of Securities Analysts. *Securities Industry Association Research Reports*. Vol. 2: 3-10.
- Finger, C. A., & Landsman, W. R. (2003). What Do Analysts' Stock Recommendations Really Mean?. *Review of Accounting and Finance*. Vol. 2(2): 67-87.
- Fontaine, P., & Roger, T. (2014). Target Prices Forecast Quality and Analysts' Forecast Performance. *Working Paper*. Retrieved from: https://www2.unine.ch/files/content/sites/irene/files/shared/documents/seminaires/Roger.pdf

- Francis, J., & Soffer, L. (1997). The Relative Informativeness of Analysts' Stock Recommendations and Earnings Forecast Revisions. *Journal of Accounting Research*. Vol. 35 (2): 193-211.
- Francis, J., Schipper, K., & Vincent, L. (2002). Earnings Announcements and Competing Information. *Journal of Accounting and Economics*. Vol. 33(3): 313-342.
- Fried, D., & Givoly, D. (1982). Financial Analysts' Forecasts of Earnings: A Better Surrogate for Market Expectations. *Journal of Accounting and Economics*. Vol. 4(2): 85-107.
- Gerritsen, D. F., & Lötter, R. (2014). The Impact of Analyst Recommendations and Revisions on The Prices of JSE-listed Companies. *Investment Analysts Journal*. Vol. 43(8): 45-57.
- Gleason, C. A., & Mills, L. F. (2008). Evidence of Differing Market Responses to Beating Analysts' Targets Through Tax Expense Decreases. *Review of Accounting Studies*. Vol. 13(2-3): 295-318.
- Groth, J. C., Lewellen, W. G., Schlarbaum, G. G., & Lease, R., C. (1979). An Analysis of Brokerage House Securities Recommendations. *Financial Analysts Journal*. Vol. 35(1): 32-40.
- Guagliano, C., Linciano, N., & Contento, C. M. (2013). The Impact of Financial Analyst Reports on Small Caps Prices in Italy. *Economic Notes*. Vol. 42(3): 217-246.
- Hall, J. L., & Tacon, P. B. (2010). Forecast Accuracy and Stock Recommendations. *Journal of Contemporary Accounting & Economics*. Vol. 6(1): 18-33.
- Healy, P. M., & Palepu, K. G. (2003). The Fall of Enron. *The Journal of Economic Perspectives*. Vol. 17(2): 3-26
- Hillary, G., & Shon, J. (2007). Sell Recommendations, Market Sentiment, and Analyst Credibility. *Working Paper*. Retrieved from: http://www8.gsb.columbia.edu/programs/sites/programs/files/accounting/HILARY.pdf
- Hou, T. C. T., Hung, W., & Gao, S., S. (2014). Investors' Reactions to Analysts' Forecast Revisions and Information Uncertainty Evidence of Stock Price Drift. *Journal of Accounting, Auditing and Finance*. Vol. 29(3): 238-259.
- Jegadeesh, N., & Kim, W. (2006). Value of Analyst Recommendations: International Evidence. *Journal of Financial Markets*. Vol. 9(3): 274-309.
- Jiang, G. J., Lu, L., & Zhu, D. (2014). The Information Content of Analyst Recommendation Revisions: Evidence From the Chinese Stock Market. *Pacific-Basin Finance Journal*. Vol. 29: 1-17.
- Karpoff, J. M. (1986). The Relation Between Price Changes and Trading Volume: A Survey. Journal of Financial and Quantitative Analysis. Vol. 22: 109-126.
- Kerl, A. G. (2011). Target Price Accuracy. BuR-Business Research. Vol. 4(1): 74-96.
- Kerl, A. G., & Walter, A. (2008). Never Judge a Book by Its Cover: What Security Analysts Have to Say Beyond Recommendations? Financial Markets and Portfolio Management. Vol. 22(4): 289-321.

- Kliger, D., & Kudryavtsev, A. (2010). The Availability Heuristic and Investors' Reaction to Company-Specific Events. *The Journal of Behavioural Finance*. Vol. 11(1): 50-65.
- Kim, 0., & R. Verrecchia. (1991). Trading Volume and Price Reactions to Public Announcements. *Journal of Accounting Research*. Vol. 29 (2): 302-321.
- Kim, O., & Verrecchia, R. (1991b). Market Reactions to Anticipated Announcements. *Journal of Financial Economics*. Vol. 30: 273–309.
- Landsman, W. R., & Maydew, E. L. (2002). Has The Information Content of Quarterly Earnings Announcements Declined in The Past Three Decades? *Journal of Accounting Research*. Vol. 40(3): 797-808.
- Li, J. Q., & Ding, Y. (2008). Institutional Effects on Information Content of US and French Management Earnings Forecasts: Evidence From Market Reactions and Analyst Revisions. *Advances in Accounting*. Vol. 24(1): 101-109.
- Li, X. (2005). The Persistence of Relative Performance in Stock Recommendations of Sell-Side Financial Analysts. *Journal of Accounting and Economics*. Vol. 40(1): 129-152.
- Lin, H., & M. McNichols. (1995). Underwriting Relationships and Analysts' Research Reports. *Working Paper*. Stanford University.
- Loh, R. K., & Mian, G. M. (2006). Do Accurate Earnings Forecasts Facilitate Superior Investment Recommendations? *Journal of Financial Economics*. Vol. 80(2): 455-483.
- Loh, R. K., & Stulz, R. M. (2011). When are Analyst Recommendation Changes Influential? *Review of Financial Studies*. Vol. 24(2): 593-627.
- Lui, Y. H. (1993). Revision Properties of Hong Kong Security Analysts' Earnings Forecasts. *The British Accounting Review*. Vol. 25(3:, 257-268.
- Lys, T., & Sohn, S. (1990). The Association Between Revisions of Financial Analysts' Earnings Forecasts and Security-Price Changes. *Journal of Accounting and Economics*. Vol. 13(4): 341-363.
- McNichols, M., & O'Brien, P. C. (1997). Self-selection and Analyst Coverage. *Journal of Accounting Research*. Vol. 35: 167-199.
- Miwa, K., & Ueda, K. (2014). Slow Price Reactions to Analysts' Recommendation Revisions. *Quantitative Finance*. Vol 14(6): 993-1004.
- Morgan, J., & Stocken, P. C. (2003). An Analysis of Stock Recommendations. *RAND Journal of Economics*. Vol. 34 (1): 183-203.
- Ryan, P., & Taffler, R. J. (2006). Do Brokerage Houses add Value? The Market Impact of UK Sell-side Analyst Recommendation Changes. *The British Accounting Review*. Vol. 38(4): 371-386.
- Savor, P. G. (2012). Stock Returns After Major Price Shocks: The Impact of Information. *Journal of Financial Economics*. Vol. 106(3): 635-659.
- Stickel, S. E. (1995). The Anatomy of The Performance of Buy and Sell Recommendations. *Financial Analysts Journal*. Vol. 51(5): 25-39.

- Walther, B. R., & Willis, R. H. (2013). Do Investor Expectations Affect Sell-side Analysts' Forecast Bias and Forecast Accuracy? *Review of Accounting Studies*. Vol. 18(1): 207-227.
- Welch, I. (2000). Herding Among Security Analysts. *Journal of Financial Economics*. Vol 58(3): 369-396.
- Womack, K. (1996). Do Brokerage Analysts' Recommendations Have Investment Value? *The Journal of Finance*. 51 (1): 137-167.