Mysterious Changes in Recommendations
Perceived Roles and Relative Importance of Direct Contacts

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Abstract
Expert judgement has often been considered as mysterious. Output is seen as created through skilled handcraft difficult to understand for the uninitiated. This paper considers the sell-side analysts work with changes in recommendations of equities. Research questions addressed refer to the analysts’ work preceding changes in recommendations. Invisible parts are further explored. The information process is of particular interest. Focus is on the role and relative importance of direct contacts in relation to other information sources used. The core issue refers to the analysts’ ability to disclose reliable and similar information to investors. The aims are to develop a process model for the analysts’ work with changes and to discuss implications of findings on market efficiency. The study is based on Kelly’s (1955) Personal construct theory. Real life changes” are used in this case study on a big Swedish broker firm “. Principal component analyses are performed. Principal components identified are “Scope of research”, “Information ground” and “Confidence in company sources”. Findings indicate that the analysts’ work adjusts to the situation faced. Relations with key actors are vital and personal sources of high importance. Analyst’s work is influenced by dependency on companies and clients. Analyst’s roles as information intermediaries, knowledge builders and businessmen are central. Direct contacts are considered as both increasing and decreasing the possibilities for efficiency on the stock market.

A Neutral Recommendation Turns Into a Buy
Abracadabra a neutral recommendation turns into a buy. This paper considers the group of sell-side analysts¹ and critical situations with changes in recommendations on equities².

"Mixen Continue its Journey!
Mixen has now entered into an agreement with two big companies, which are responsible for 30% of Mixen’s sales. An agreement has still not been reached with one of the big companies, but there is no need to worry about this according to, the President and CEO. The company states that this agreement is on a level with earlier contracts and is not expected to influence the result negatively. The uncertainty regarding these agreements has now been cleared up and we believe that Mixen will continue the journey towards their proposed goal to grow by 20 % per year during the next three years. We expect Earnings/Share this year to be SEK 3.2, Price/Earnings to be 20, and next year Earnings/Share to be SEK 4.5 and, Price/Earnings to be 14, at the price SEK 61/Share.
We change our recommendation from neutral to buy.

¹ Analyse companies/equities and provide advices to external clients i.e. institutional investors Olbert, 1992; Vergoossen, 1993 and Tuominen, 1995
² Hereafter change
The example above illustrates a documented change in recommendation. Recommendations as the case with Mixen tend to influence investors’ behaviour\textsuperscript{3}. The change is a product of the analyst’s work. The change on Mixen can be seen as created through skilled handcraft difficult to understand for the uninitiated. What is unknown and invisible tend to be mysterious. The border between the visible and invisible depends on the eyes of the beholder and may not be clear. Visibility can be connected both to investors/clients and analysts. A professional investor may be able to read between the lines. Additional knowledge on Mixen may be received through discussions with the analyst/broker firm. A “naïve” investor gets to know that the equity is worth buying but may not understand why.\textsuperscript{4} The analyst who performed the change may be unaware of the work process performed in a routinely manner\textsuperscript{5}.

The content of analysts’ advices can be further understood through a look at the analysts work and information processes. Parts of these processes in Mixen may be imagined or read between the lines. Importance and roles played by sources can vary. New and limited information from a press release may trigger this change based on an event. An agreement is reached. Direct contacts with company representatives can be important for interpreting consequences\textsuperscript{6} and supporting the decision made. There is according to the representative “\textit{no need to worry}. Roles played by sources can also be of a social character\textsuperscript{7}. Direct contacts can indicate access to first hand company information.

Knowledge about the sell-side analysts work in real life situations with changes is limited. Previous studies on changes are mainly performed at the market level\textsuperscript{8}. Many studies on analysts\textsuperscript{9} use of information sources are survey studies, based on general situations. Information and sources are often ranked without considerations of the context.\textsuperscript{10} Processes with use of separate sources in general situations have been considered in studies. There are

\begin{itemize}
\item \textsuperscript{3} Givoloy and Lakonishok, 1984; Stickel, 1995; Hellman, 2000
\item \textsuperscript{4} Naïve, i.e. without knowledge or experience of accounting and financial information. For Naïve/Professional see e.g. Lee & Tweedie, 1981, Bohlin, 1987 and Bloomfield et. Al. 1999.
\item \textsuperscript{5} See MacIntosh, 1985, p.222, Spybey, 1989, p.32
\item \textsuperscript{6} Direct contacts mainly include two-way verbal communication between one/several analyst(s) and and/several representative(s). Examples are company presentations, breakfast meetings, one-to-one meetings and telephone calls. Examples of representatives: IR-person, CEO, CFO, managers at different levels, people at R&D and “workers” (Johansson, 1998)
\item \textsuperscript{7} Feldman and March, 1981; Macintosh, 1985, p. 154
\item \textsuperscript{8} Givoloy and Lakonishok, 1984; Stickel, 1995
\item \textsuperscript{9} Including the group of stock market participants e.g. sell side analysts, buy-side analysts, portfolio managers and business journalists. See Bouwman et. al, 1987; Schipper, 1991; Olbert, 1992; Tuominen, 1995; Williams et. al, 1996; Vergoossen, 1997; Hellman 2000.
\item \textsuperscript{10} E.g. Lee & Tweedie, 1981; Chang & Most, 1981; Arnold & Moizer, 1984
\end{itemize}
also studies considering the process of general use of separate information sources such as annual reports and direct contacts. Documented recommendations are studied through content analyses. There are also studies based on in-dept interviews and verbal protocol analysis. A few studies consider specific situations with recommendations in real life contexts. This study considers specific real life situations with changes performed by analysts.

The core issue is here connected to the analysts’ ability to disclose reliable and similar information to investors regarding companies’ and shares. The issue is of both theoretical and practical nature. Objectivity in information, “fairness” between groups of investors and information efficiency are topics considered. Reliable and similar is related to the analysts’ roles as information intermediaries, knowledge builders and businessmen. The aim of the paper is to develop a process model for the analysts’ work with changes. It is also to discuss some implications for the market efficiency on the results. The discussion is also connected to the issue of corporate failure and a lack in confidence regarding accounting experts. An attempt is made to tie the actor and organisational levels to the market level.

This study based on Personal construct theory (PCT) with mapping of analysts’ cognitive structures can help to visualise analysts’ work and advises to clients. Improvement of a “shared” language can help to increase the common sense of the phenomena and serve as a basis of dialogue. This can have implications for both analyst organisations and external groups. Changes need not to be seen as if an analyst, like a wizard, produces information through a magic formula, “abracadabra”.

**Influence investor behaviour**
Recommendations such as the one in Mixen indicate to influence investor behaviour. They tend to be important and also influence the institutional investors’ work with investment

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11 Day, 1986
12 Johansson, 1998
13 Previts et al, 1994; Rogers and Grant, 1997
14 Holland and Doran, 1998
15 Biggs, 1984; Day, 1986; Bouwman et al. 1987
16 E.g. Hellman, 2000
17 The study is inspired by A. Giddens “Structuration theory” See MacIntosh, 1997
18 Kelly, 1955
19 company representatives, clients, groups of investors, institutions representing society.
decisions\textsuperscript{20}. On the market level, recommendations and changes indicate to be central for determining the price levels in several international equity markets. Prices tend to move up with upgrades and down with downgrades.\textsuperscript{21}

Let's consider the influential changes from a rational framework of market efficiency. The hypothesis of an efficient market (EMH) is based on a general concept of fair distribution. All important information is in the ideal situation mirrored in the price. All investors also have equal access to information. Efficient market means in other words information efficiency. It should not be possible to systematically achieve abnormal returns\textsuperscript{22}. Market efficiency is here considered at the semi-strong and strong levels. Each level represents different amounts of information reflected in the price of a stock. Efficiency at the semi-strong level implies that all public information is mirrored in the price. Efficiency at the strong implies market efficiency to the ultimate extreme where both official and private information is mirrored in the price.\textsuperscript{23}

**Individual/organisational aspects**

Efficient market theory however tend to neglect the individual/organisational aspects. It only considers the pure exchange of information and excludes the matter of how information is produced, acquired and processed by core groups, as analysts, on the stock market.\textsuperscript{24} Tying different levels of aggregations together is however connected to problems. Aggregated markets are for instance related to multiple actors and differences in choice sets. Certain behavioural dynamics are proposed to provide casual links. Examples of such behavioural dynamics can be norms of behaviour and followership.\textsuperscript{25}

Roles played by the analysts can be linked to a discussion on efficiency. The discussion is based on an ideal case from a rational perspective. Analysts’ can be seen as an informed and knowledgeable group that may help to contribute to the semi strong level of efficiency through their informed response to news. They have a role as intermediaries of information. They help to improve the flow of information. Market participants are provided with

\textsuperscript{22} [d]ifference between the actual price and the price investors expected given a particular set of information.” Brealey and Myers, 1996, p.336
\textsuperscript{23} Abdel-Khalik & Ajinkya, 1982; Fama, 1990; Brealy & Myers, 1996
\textsuperscript{24} Holland 1996, 1998
accurately interpreted information. This may be especially related to the naïve investors, i.e. investors lacking understanding and ability to use accounting information. Analysts in the later case also tend to have a role as knowledge builders. A main role played by analysts is the role as businessmen. They are supposed to generate businesses for their organisation. (Holmes & Sugden, 1991.) Businesses may however be generated through intermediation of information and building of knowledge. Market efficiency is provided through generating of businesses to the analysts’ organisation. On an efficient market all actors have equal access to information.

Less informed, naïve investors might be seen as price protected on a market where all information available is reflected in the price. However, analysts seem to give their clients valuable advice that increases their possibility of obtaining higher returns. Laboratory studies indicate that prices respond more strongly to information that is held by more investors. Response and market adjustment tend to be spread over a longer period, from the pre-publication date where selected clients receive information, to the time delay of interpreting and acting by others. Small naïve investors probably act when information are held by many. High and fast access to changes can thus be expected to influence the investors’ possibilities for returns. This raises the question of equal access to analyst information.

**Openness in information**
The matter of equal access to information is related to openness in information. Three types of information relevant to consider is information of official, proprietary and private character. Official information is publicly available for present/potential investors. Proprietary information is official information added value to through the analysts’ work. Private information also called insider information is information not yet officially disclosed. It can be information disclosed to selected people.

Official sources are open in nature while private sources are closed. Examples of the most official sources are annual and interim reports available for all investors. Direct contacts

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25 Ashton & Ashton, 1995
26 Breton & Tafler, 1995
28 Bjerring et al, 1983; Liljeblom, 1989
29 Lundholm, 1991
belong to the most private sources. Such contacts can however be more and less official. Meetings for the groups of analysts are fairly open and official. One-to-one\textsuperscript{32} meetings are more closed and private. Annual reports are available for all investors while it is a bonus for analysts to be the first with new information. Direct contacts and annual reports tend to be among the most important sources. A slight change in attitudes towards a higher importance of direct contacts is identified.\textsuperscript{33} One reason proposed is an increased concentration of the institutional ownership\textsuperscript{34}.

Analysts’ willingness to follow a company seems to depend on the company’s willingness to communicate with them\textsuperscript{35}. Direct contacts thus imply attention to the company. Direct contacts tend to include mutual exchange and dependency. A significant positive relationship has been noted between the volume of shares traded and the level of non-report information from companies, such as direct contacts, cited in analyst reports. More trading indicates an increased demand for in-depth analysis of companies and an increase in the analysts’ supply of service.\textsuperscript{36} Direct contacts tend to be related to the analysts’ role of generating businesses for the firm.

Findings indicate that analysts have an information advantage compared to other actors on the market\textsuperscript{37}. They use “all” publicly available information and also to some extent information not yet made official\textsuperscript{38}. A grey zone of information between official and private information is identified in connection to usage of direct contacts. Direct contacts seem to have a role to provide new and fast information to analysts. Direct contacts are connected to a risk for exchange of insider information.\textsuperscript{39} This raises the question of equal access to information on the equity market.

\begin{flushright}
\footnotesize{31 Boldt & Arbìt, 1984}
\footnotesize{32 one analyst – one representative}
\footnotesize{34 Holland, 1998; Hellman, 2000}
\footnotesize{35 Lang & Lundholm, 1993, 1996 and Bhushan, 1989}
\footnotesize{36 Rogers 1996, p.112.}
\footnotesize{37 Abdel-Khalik & Ajinkya, 1982}
\footnotesize{38 Fried & Givoloy, 1982}
\footnotesize{39 Johansson, 1998}
\end{flushright}
Direct contacts relatively other sources
Lets now further consider the content in changes such as Mixen through the analysts’ usage of direct contacts relatively other sources. Uncertainty in the environment and in information tends to influence the analysts work. Uncertainty is for instance connected to ambiguities in the accounting language with possibilities for different interpretations\(^{40}\). The accounting language is also limited in its capacity. Intangibles of importance for estimating the value of a share may for instance be difficult to estimate\(^{41}\).

Different mixes of information and sources seem to be needed at different points in time. For different occasions and purposes\(^{42}\). The context for the work is thus important. Accounting reports tend to be a base-point of reference\(^{43}\). More detailed and/or comprehensive information may be needed to decrease uncertainties\(^{44}\). Trusted sources tend to be used more frequently than trusted sources\(^{45}\). Sources are also used for checking trustworthy in information and in other sources\(^{46}\). Direct contacts can provide a better understanding of matters behind the figures in official reports. Plant visits can give a picture of the physical/operational business and provide understanding of a company/industry\(^{47}\). Documented sources are static in nature while verbal sources are more flexible. Verbal sources can also provide unexpected information. Mixes of financial and non-financial information seem to improve the understanding of the situation\(^{48}\).

Direct contacts seem important for the analysts’ roles as information intermediaries and knowledge builders. Companies and their situations can better be understood and thus improve investment decisions.

Accurate information
Analysts as intermediaries of information and knowledge builders are expected to provide reliable, un-biased information. Investors need un-biased information for their investment

\(^{40}\) Bricker et al. 1995 McSweeney, 1997 Gambling, 1985
\(^{41}\) Gambling, 1985; Holland, 1998
\(^{43}\) Bence et al, 1995; Rogers, 1996; Rogers & Grant, 1997
\(^{44}\) Gambling, 1985Previts et al 1994, p. 61
\(^{45}\) Hellman, 2000
\(^{46}\) Johansson, 1998
\(^{47}\) Day, 1986; Gniewosz, 1990; Tuominen, 1995
Institutional investors use reports and advices from several analysts for their decisions. They also have access to information to other sources, among them first hand company information. Naïve investors rely heavily on recommendations by professional advisors as bank personnel for investment decisions. Experts tend to be more important than annual reports. Small investors tend to be dependent on experts both for knowledge about the history and the future. They have confidence in information provided by experts as intermediaries of information. However, psychological studies suggest that less informed investors might suffer from overconfidence and trade too aggressively given their information.

Financial analysts appear to have only moderate insight into their cue usage patterns. Understanding of financial statements by analysts tends not to be as good as expected. There are contradictory findings concerning the accuracy of analysts’ forecasts. Early studies in particular suggest no differences between analysts’ forecasts and mechanical models, while later studies find analysts’ forecasts superior. This raises the question of reliable information. Parity between the forecasting performance of analysts and managers are identified. This may partly be explained by regular direct contacts with exchange of information. Contacts improve the analysts’ forecasting ability. The similar forecasts raises questions of both equal access to information and of analysts’ objectivity in information.

Recommendations provided by analysts indicate to be biased. Negative information tends to be avoided or used carefully in reports. The power of written words may be one explanation. More buy-recommendations than sell-recommendations also indicate a bias in information. Other business relationships between the analysts’ organisation and companies also influence the objectivity in information. Bias seem to be an expression for dependence that need to be

49 Solomons, 1991
50 Hellman, 2000
51 Lee and Tweedie, 1981; Bohlin, 1987
52 Lee & Tweedie, 1990; Chang & Most, 1981; Anderson & Epstein, 1995
53 Griffin and Twersky, 1992
54 Meir & Firth, 1987
55 Lee & Tweedie, 1990, p.44.
56 Review by Givoloy and Lakonishok, 1984
57 Givoloy & Lakonishok, 1984; Lang & Lundholm, 1996
58 Breton & Taffler, 1995; Boland & Bricker, 1995; Rogers, 1996
59 Previts et al, 1994
considered for understanding the content of the changes. Analysts are dependent on companies both for information and to generate businesses for the firm.\textsuperscript{60}

Reputation concerns by the analyst may be one explanation for biased information and time delays. To show their forecasting ability and not admit inappropriateness of earlier prognoses analysts tend to disclose prognoses close to prior prognoses. Recommendations can also be kept even though it should have been changed long ago.\textsuperscript{61} Herding behaviour among analysts has in a similar way been related to reputation concerns. Analysts tend to follow the herd despite of information in opposite direction\textsuperscript{62}. The discussion above raises the question of reliable information and recommendations by analysts.

\textbf{Rational actions}

A rational view of investors’ action and decision in accordance with the classical decision-theory is mainly considered so far. This theory suggests that information is only gathered and used to facilitate decision-making. More information than needed is however collected. Information also tends to be used for justification of previous decisions. One rational explanation for this can be deficiencies in the human capability. Use of information as a symbol for competence and social efficiency may be a less rational explanation. In a society believing in intelligent choice are more information expected to provide better and reliable decisions. People with more information can be seen as ideals. Observable features of the use of information can become important when there are few possibilities of gaining access to a decision-maker’s knowledge. This may be the case with the analysts work. The information process can be seen as a way to make social life meaningful and acceptable.\textsuperscript{63} It may also be a way for the analysts to generate businesses for the firm.

In a social setting accountants as analysts tend to have different conflicting roles. They may be on several sides in one conflict. These intertwined roles may be invisible for the actor.\textsuperscript{64}

\textbf{Analysts’ cognitive structures}

“The reports are not records of the decision processes, they are the formal explanation of the recommendation”\textsuperscript{65}. Knowledge about analysts’ cognitive structures and the content of such

\textsuperscript{60} Holmes & Sugden, 1991.
\textsuperscript{61} Trueman, 1994 Berg, Dickhaut and McCabe in Ashton& Ashton, 1995, p.124
\textsuperscript{62} Graham, 1999; Wermers;1999; Olsen 1996
\textsuperscript{63} Feldman & March, 1981; Macintosh, 1994, p.154
\textsuperscript{64} Tinker, 1991
structures improve the possibilities to understand the analysts’ work and the content of the changes. More is known on the functioning of the equity market. This study is based on Kelly’s (1955) personal construct theory (PCT). Actors are according to PCT seen as personal scientists. They classify, categorise and produce theories of their environment. Mapping of cognitive structures makes it possible to understand the history of the person and to some extent predict the future. Experiences influence the analysts’ expectations on their environment, as well as the way in which they perceive or comprehend the environment. It is through experiences we learn. The person’s experience develops when he or she is confronted with a specific situation or event and compares similarities and differences with previous and/or other situations/events (Kelly, 1955). In this, the analyst’s previous experiences, both private and professional, influence their information use and processing when forecasting a specific company’s future business and development.

Methods and analyses

Let’s now consider usage of methods and analyses of the material.

Repertory Grid Technique

The method repertory grid technique, closely connected to PCT, is used for understanding the analysts’ system of constructs. The analysts system of constructs in the work with changes can be understood both in structure and in content. The method is well tested and brings forth a reliable representation of cognitive structures. It can be used for raising awareness of the process of learning and help to exceed the obvious. An advantage with the method is the limited influence by the researchers on the actor. The analysts reflect upon their experiences of changes through the use of “bi-polar constructs. The elements, i.e. situations with changes, decide the system of constructs to be studied. Constructs are the respondents’ own way of classifying the elements. Changes are compared relatively to each other on constructs elicited. Figure 1 includes an example with three changes as elements, one of them Mixen. The three changes are compared on two constructs. NCC and Mixen are highly event based

Govindarajan, 1980
ibid p.46.
Stewart and Stewart, 1981
The method is for instance used within research on financial analysts Stabel, 1978, on managers Ims, 1987 and in educational research See Häckner et. al, 1996
Neimeyer & Levitt, 2000, Reger, 1990
A 7-graded scale was used.
Fransella, 1978, p.5, Fransella and Bannister, 1977
while H&M is not. H&M and Mixen were easy to produce while the change in NCC was difficult to produce.

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**Figure 1 A repertory-grid example**

**Time consuming design**
The main criterion for selection of broker firm was access to firm interested in participating. The time consuming design and the character of the study that may be perceived as sensitive set the criterion. Twenty-four of the twenty-five analysts working at the stockbroker firm participated in the study. Data is collected through triangulations of methods i.e. through interviews, documents and limited observations. The study is performed in three phases. Purposes with phase one were mainly to elicit constructs to be used in the third phase and to further develop the design. Two analysts at Navigator Invest were interviewed at five versus three recurring occasions during the period March to June 2000. The total time spent on interviews with the two analysts was fourteen versus eight hours. The second phase took place in June 2000. The purpose was to test and develop the constructs elicited in phase one and to develop the design for phase three. Three analysts from another broker firm were interviewed 30 to 60 minutes each. The third phase includes the remaining analysts at Navigator invest. Each analyst was personally introduced in material to be considered. Limited observations took place at the weeks spent at the department. Situations chosen for discussion are concrete cases with documented changes from the analysts’ real life. The analysts’ selected between three and six changes, elements, each. A total amount of 81 elements were included. Most changes are changes in recommendation but a few changes in target price are also included. Sixteen of the analysts were able to discussed more than three

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72 One refused motivating it by the heavy working load and lack of interest
73 The extent of the documents varied from one page to more than 30 pages.
changes and thus included in the Multigrid analysis\textsuperscript{74}. Remaining analysts used the material for general discussion of their work with changes and/or recommendations.

**Theory developing and generating character**
The analyses are of a theory developing and generating character rather than theory testing. The qualitative and quantitative analysis are seen and used as complements to each other. The study is based on an abductive approach\textsuperscript{75}. The triangulation of methods calls for multiple analysis of the empirical material. Interviews are tape-recorded and transcribed word by word. Coding of the interviews was made by hand in a systematic manner. Many categories were directly connected to the structure of the repertory grid analyses. Other categories also emerged in this coding.

**Analyses of the repertory grid**
The software programs Flexigrid and Multigrid were used for analyses of the repertory grid\textsuperscript{76}. Findings based on the Multigrid are mainly presented here. The actors systems of constructs are here presented quantitatively and qualitatively\textsuperscript{77}. Content in the repertory grids and relations between constructs and elements were analysed with PCA\textsuperscript{78}. One purpose with the PCA is to map the most central dimensions of thoughts. Analyses were made on both actor and group level. Basic and underlying structure for how the analysts thought in situations with changes was identified.

Principal components were identified. These were interpreted through the constructs with the highest factor loading and the elements with the highest factor scores. Three components, answering for around 40\%\textsuperscript{79} of the variance in the material were selected for further analysis of the average grid\textsuperscript{80}.

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\textsuperscript{74} Remaining analysts either lacked experiences, was new at the firm or did no longer follow companies. The Myltigrid analysis is further considered below.

\textsuperscript{75} Alvesson and Sköldberg 1994, p.41

\textsuperscript{76} Flexigrid for individuals and Multigrid for groups Tschudy, 1998

\textsuperscript{77} Graphically presentations are also possible

\textsuperscript{78} Stewart and Stewart, 1981

\textsuperscript{79} Indicating a fairly complex structure in the material.
**Navigator Invest**
Findings from the case study on Navigator invest is now presented and discussed.

**On the Context and Output**
Some findings on the context and output related to the analysts work and the changes as such are now considered. This is connected to the matter of reliable and equal information.

**Clients, companies and the own organisation**
Analysts’ have a key role in generating business for the own organisation. The analysts clients are primary the institutional investor organisations. Documented changes are made for this group. Services provided to clients tend to differ. Some clients only receive the documented change. Other clients receive a more extended service including discussions adjusted to the particular needs. There are clients where the analyst nearly “sits in the lap of the client” Such “Pet-clients” can for instances get the analysts own models thoroughly described by the analyst. Clients tend to rate broker firm’s services. Most businesses tend to be made with the highest rated firms. The analyst has a role to generate trading for the broker firm through their services to clients. High ranking by big institutional investors implies more businesses for the firm.

Services provided by the analysis’s organisation to other groups of investors than the institutional investors differ. Those receiving least services are the small private investors turning to the bank office. These clients may receive a recommendation on buy or sell and some advices from the bank personnel. Information seems to pass through several steps in the organisation before it reaches such private investors. Small investors have no access to the documented change and discussions with analysts. Studies within organisational theory indicate that information gets loss and distorted when passed through several steps in the organisation. This can be expected to be the case with the content of the information to small investors.

A dependency between the analysts’ and the traded companies is identified. Analysts are for instance dependent on representatives for information. Close relations to representatives tend to increase the access to information. Such relations also make it possible for the analysts to better estimate the trustworthiness of the information received. A grey zone of information is

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80 Tshudy 1992 For selection of principal components and further description of the repertory grid technique see Fransella and Bannister (1977) and Tschudi (1992).
identified. This supports the findings in Johansson (1998). The analysts’ role to generate businesses for the firm is another link of dependency. Companies are potential clients for the corporate finance department. They are also present and/or potential clients for the banking activities by the analysts’ organisation.

**Output of changes**

Documented changes performed at the firm tend to be limited. Changes in some companies for instance tend to occur regularly once a year. Situations for companies/shares changes and this are supposed to be mirrored through the analysts’ changes in opinion. However changes also take place through discussions with clients. Analysts easily switch between opinions in such discussions. Contacts with clients are perceived as more important than the documented changes. Clients’ interest in the mere recommendation, e.g. “Buy”, tends to be limited. They make their own opinions. In the study by Hellman (2000) based on institutional investors recommendations by sell-side analysts were used for estimating the opinion on the market i.e. the consensus view. More nuances of consensus may however be received through verbal recommendations.

Changes based on novelty for instance new information or new ideas tend to be strived for. Novelty generates businesses for the firm. Consistency in opinion tends at the same time to be important. One reason is that it takes time for the clients’ organisation to act on the advices. Analysts who often change opinion are also considered as inconsistent. The desire for consistency seems to cause a time lag between the identification of a change and the actual change. Analysts indicate to wait with changes not to be perceived as inconsequent. The reputation concerns may be one reason for the limited amount of documented changes. Verbal changes tend to be easier to make for the analyst whom thus also remains consistent. All clients or investors may not receive such changes.

Analysts tend to make extended research and use many arguments in situations with negative information. This is both motivated by the dependency on companies for information and dependency on clients for generating businesses. Negative information about a company can harm the relation and thus access to information. Such information may also question a portfolio manager who has a particular share in the portfolio. The actual outcome of the situation is however important for the analyst who is evaluated by clients on earlier track record.
The firm has a scale of recommendation without a “Neutral” recommendation such as “Hold”. None of the elements include a recommendation “Sell”. There are no changes either to or from “Sell”. Both recommendations on “Hold” and “Sell” are however indirectly included. The analysts for instance use nuances in the written language to indicate the strength of the recommendation. Instead of writing, “Sell”, they write, “Reduce” but argue for the recommendation as to be very weak and understood as to be a “Sell”. This also helps to balance and keep relations with both companies and clients. Nuances are used both in the documented recommendations and the verbal recommendations to clients. Such nuances are thus not available for all clients and investors.

**Key findings**

Analysts tend to be dependent on both companies and clients. Direct contacts seem to be used for balancing these dependencies. Negative information is for instance adjusted for through the contacts, at least to some degree. Both relations of vital importance can be kept. The matter of reliable and equal information tends to differ between institutional clients and small investors. Small investors indicate to receive less timely and reliable information than the analysts’ clients, the institutional investors. Biased information seems to be adjusted for in front of institutional clients. This informed group could also be expected to be more aware of consequences in information content caused by dependency in relations. They may be aware of the bias. Small clients have less access to the information intermediated and the knowledge provided by analysts. They may also be aware of the biased information caused by analysts’ dependency in companies and clients. The analysts’ roles as information intermediaries and knowledge builders mainly refer to the main clients, those generating the main part of the businesses for the firm.

**The analyst’s work with changes**

Three principal components are identified as central for explaining the analysts work with changes.

1. Scope of research
2. Information ground
3. Confidence in company information.
Let's take a closer look at each one of the three components on the surface. The components are related to the most central data in form of main constructs and main elements. Main constructs\textsuperscript{81} are for each component presented within tables. Main elements\textsuperscript{82} are briefly discussed and connected to illustrating examples.

Scope of research
Constructs and elements connected to the first component tend to be related to the analysts’ research, to “Scope of research”.

Table 1 Constructs- “Scope of research”

<table>
<thead>
<tr>
<th>Pole</th>
<th>Contrast</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pole</td>
<td>Pole</td>
<td>Factor loading</td>
</tr>
<tr>
<td>DEEP RESEARCH</td>
<td>CURSORY RESEARCH</td>
<td>0.787</td>
</tr>
<tr>
<td>FREQUENT CONTACT</td>
<td>NO COMPANY CONTACTS</td>
<td>0.646</td>
</tr>
<tr>
<td>BROAD RESEARCH</td>
<td>NARROW RESEARCH</td>
<td>0.617</td>
</tr>
<tr>
<td>COMPANY DOCUMENT VERY IMPORTANT</td>
<td>COMPANY DOCUMENT NOT IMPORTANT</td>
<td>0.654</td>
</tr>
</tbody>
</table>

A further look at constructs and elements for the pole indicate a situation based on “Extended research”. The situation is characterised by deep and broad research with frequent direct contacts and high importance of company documents. The pole is connected to fourteen main elements. These are of both upgraded and downgraded character, i.e. both negative and positive. There are both one-step and two-step changes\textsuperscript{83}. Two-step changes can be considered as particular critical.

The contrast is connected to situations with narrow and cursory research, no use of direct contacts where company documents are of non-importance. It tends to include situations based on “Limited research”. All fourteen elements are of negative character, i.e. downgraded recommendations or decrease in target price. Both one-step and two-step changes are included.

The second component tends to be connected to the “Information ground”.

\textsuperscript{81} Limit +/- 0.6 for factor loadings
\textsuperscript{82} Limit +/-1 for factor scores
\textsuperscript{83} A two step change can e.g. be from “Reduce” to “Strong Buy
Table 2 Constructs - “Information ground”

<table>
<thead>
<tr>
<th>Pole</th>
<th>Contrast</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantial information ground</td>
<td>Weak information ground</td>
<td></td>
</tr>
<tr>
<td>INDUSTRY CONTACT VERY IMPORTANT</td>
<td>INDUSTRY CONTACT NOT IMPORTANT</td>
<td>0.915</td>
</tr>
<tr>
<td>EASY TO ACCESS ACTORS</td>
<td>DIFFICULT TO ACCESS ACTORS</td>
<td>0.724</td>
</tr>
<tr>
<td>OTHER SOURCES VERY IMPORTANT</td>
<td>OTHER SOURCES NOT IMPORTANT</td>
<td>0.746</td>
</tr>
<tr>
<td>COLLEAGUES VERY IMPORTANT</td>
<td>COLLEAGUES NOT IMPORTANT</td>
<td>0.674</td>
</tr>
<tr>
<td>HARD TO GET COMPANY INFORMATION</td>
<td>EASY TO GET COMPANY INFORMATION</td>
<td>0.633</td>
</tr>
</tbody>
</table>

The pole of the second component tends to be connected to a “Substantial information ground” where many sources are important for the work. Personal sources such as direct contacts tend to particularly important. Access to company sources tends to be high. The “Substantial information ground” seems to be related to companies dependent on research and development for their future profitability. A substantial information ground may decrease uncertainties in information and on the situation.

The contrast is related to situations where few information sources are important and the access to company sources and information is low. This indicates a “Weak information ground”. Elements tend to be of a repetitive character. This may indicate a lower demand on the information ground. The contrast is so far labelled “Weak information ground”. Elements connected to the second component tend not to be particularly critical regarding strength and direction of changes. There are one-step changes of both upgrading and downgrading character.

The third component tend to be connected to “Confidence in company sources”

Table 3 Constructs - “Confidence in company sources”

<table>
<thead>
<tr>
<th>Pole</th>
<th>Contrast</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low confidence in company sources</td>
<td>High confidence in company sources</td>
<td></td>
</tr>
<tr>
<td>NO CONFIDENCE IN COMPANY DOCUMENTS</td>
<td>HIGH CONFIDENCE IN COMPANY DOCUMENTS</td>
<td>0.983</td>
</tr>
<tr>
<td>NO CONFIDENCE IN COMPANY CONTACT</td>
<td>HIGH CONFIDENCE IN COMPANY CONTACT</td>
<td>0.936</td>
</tr>
<tr>
<td>SOMETHING NEW DID OCCUR</td>
<td>NOTHING NEW OCCURRED</td>
<td>0.677</td>
</tr>
<tr>
<td>COMPANY CONTACT VERY IMPORTANT</td>
<td>COMPANY CONTACT NOT IMPORTANT</td>
<td>0.625</td>
</tr>
<tr>
<td>HARD TO GET COMPANY INFORMATION</td>
<td>EASY TO GET COMPANY INFORMATION</td>
<td>0.614</td>
</tr>
</tbody>
</table>
The elements related to the pole of the third component seem to include event-based situations with high uncertainties connected to the situation. It is in the general case for this component difficult to access company information. Information from the company can thus also be expected to be uncertain. The confidences in the company sources tend to be low and the pole is thus on the basis of these findings on the surface labelled “Low confidence in company sources”.

The contrast is related to non-event changes where there tend to be a basic confidence in the companies and the company sources. Most of the elements still refer to situations with downgraded changes or decrease in target price as discussed above. The confidence in the direct contacts is high but these sources are not considered as to be important. All changes are one-step changes, not particularly critical. The contrast of the third component is on the basis of the findings on the surface labelled “High confidence”.

**Behind the three components**

**Behind the scope of research**

“Extended research” including extended efforts and/or high ambitions tends to be connected to different trends and variations that influence the companies and its businesses. It can for instance be business cycles, trends on the market, fashion trends, seasonal variations and variations in price. These quite analysable trends tend to influence the analysts work. The analyst’s research behaviour is high. The analysts seem to use offensive research strategies to handle the trends and variations. Extended analysis and calculations of critical factors tend to be performed in a structured manner. Deep research from many perspectives with usage of many information sources is used. The historical company documents are perceived most important but are complemented with information from other sources. Direct contacts and other personal sources are for instance used to get and to maintain a feeling of the trends and variations. A change in Assi Domain from “Reduce” to “Strong Buy” in spring 2000 is an example of an element.

The “Limited research” tend to be connected to situations where the analyst receives new information. The new information derives from internal sources as the analysts’ colleagues and from external sources such as the company. The changes tend not to be an output of offensive acting it is rather caused by reaction and/or defensive acting. Time is sparse and fast reactions needed. The work tends to be performed in an intuitive manner. There is a lack in
time to perform deep and extended analysis. Few factors mainly based on the new information are considered. There are changes related to technical analyses. The focus tends to be narrow, on small parts. Risks connected to the companies tend to be low. Risks connected to limited parts of a company can still be high. The documented output tends to consist of short updated recommendations. Analysis and valuations are limited as well as the information searched for. The analyst’s research behaviour can be described as low. A change in Telia from “Buy” to “Reduce in November 2000 is an example of an element.

**Behind the information ground**
The elements related to the “Substantial information ground” tend to departure from an uncertain situation, a flimsy ground. The flimsy ground is connected to structural and strategic factors, long time-perspectives, analyses of new companies and unexpected company reports. The changes tend to be related to a high degree of soft information and also associated with a high degree of uncertainties. The analysts in tend to handle the flimsy ground through usage of many different sources, particularly personal sources. Value added information is actively searched for. Discussions with many people, especially the “right people” trusted by the analysts, and establishment of closer relations tend to generate value added information. Information is also validated through this. Access to company representatives and to company information tends to be high. Close relations with company representatives also tend to increase the confidence in the company. The usage of many sources and access to company sources can provide much information but it can also help to symbol a good job performed by the analyst. Uncertainties are also handled through usage of scenarios. Scenarios can be connected to a risk of simplifying the reality too much. The flimsy ground turn into a solid or at least more solid ground than before through the analysts work. A change in Getinge from “Buy” to “Strong Buy” in November 2000 is an example of an element.

What seemed to be a "Weak information ground" on the surface of the findings emerged to be a “Basic information ground” under the surface. The “Basic information ground” is related to situations where few information sources are important. The analysts work tend to departure from a solid ground, a position perceived as fairly certain. Information also tends to be certain. The work seems predictable and relations between cause and effects known. The focus is on the analysts stock of experience and knowledge rather than on information and information sources. The analyst tends not to be particularly active in search of information.
The analysts react on new information or reuse earlier information received. The changes can be seen as knowledge-based. The information ground tends to be basic. The changes seem to depart from a solid ground and also end in a solid ground through usage of basic information. An example of an element is a change in Ericsson, December 1998, from “Strong Buy” to “Buy”.

Confidence in company sources

The situations with “High confidence in company sources” tend to be related to situations with negative changes. The companies tend not to be related to high risks. The situations are not based on new events. Uncertainties connected to the changes indicate to be low. Examples of situations are changes where the share is fully valued and thus changed. A general confidence tends to build on earlier experiences and track records of the company sources. Changes are not made because of management. It seems important to emphasise the high confidence in the company despite of the downgrading. Negative information may harm the relation with the representatives. This seems to be handled through the indication of high confidence despite of the negative message. The expression of high confidence for rationalisation of the change can help to explain the contradicting relation between high confidences in the company sources even though the sources not are important for the situations. An example is a change in Clas Ohlsson, December 2000, from “Buy” to “Reduce”.

The low confidence is related to an uncertain situation based on new events more than to the confidence in the sources as such. The companies tend not to be able to influence the situation. Nobody really knows how it will come to be. An example of an element is a change in Volvo in fall 1999 from “Buy” to “Reduce”. In the case Volvo a decision by the European Commission on the restraint-of trade practice was considered. Nobody knew about the time for and the content of the outcome.
Figure 2 The analyst’s work with recommendation changes

<table>
<thead>
<tr>
<th>Components</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scope of research</td>
<td>Information ground</td>
<td>Confidence in company sources</td>
</tr>
<tr>
<td>Labels</td>
<td>Extended efforts/ High ambitions</td>
<td>Limited efforts/ Limited ambitions</td>
<td>(Weak) Basic information ground</td>
</tr>
<tr>
<td>Direction</td>
<td>Up- and down</td>
<td>Only down</td>
<td>Up and down</td>
</tr>
<tr>
<td>Strength of change</td>
<td>Include two-step</td>
<td>One step/ target price</td>
<td>One step</td>
</tr>
<tr>
<td>Scope of report</td>
<td>Limited</td>
<td>Extended</td>
<td>Limited/ Extended</td>
</tr>
<tr>
<td>Character of situations</td>
<td>Trends and variations Analyzable</td>
<td>New information Sparse time</td>
<td>Strategic/ structural issues</td>
</tr>
<tr>
<td>Dimensions of information</td>
<td>Mainly hard Historical base Soft e.g. to understand and/or motivate the future.</td>
<td>Mainly soft Hard at the end Future base</td>
<td>Mainly soft Historical Knowledge based</td>
</tr>
<tr>
<td>Character of work process</td>
<td>Time consuming High research behaviour</td>
<td>Time consuming Active/ offensive Info. based Value added info. Scenarios</td>
<td>Time consuming/ Fast reactive Knowledge based</td>
</tr>
</tbody>
</table>

Negative information tends to be legitimised in situations related to “Limited research” where the analyst intuitively tends to react on new information. The herd may be expected to move. It is also legitimised in situations with “High confidence in company information”. High signalling of high confidence despite of negative information may help to maintain the relation.

A shimmer of neutrality

Key actors on the financial arena tend to work under a shimmer of neutrality. The analysts’ dependency on clients and companies together with the main role as to generate business for the own organisation makes it close to impossible for the analysts to remain objective.
Information is also intermediated to investors but not to all investors at the same time. The system calls for inherited conflicts where the analysts are more or less forced by the structure to disclose both selective and unreliable information even though the opposite is expected. Informed investors aware of the problem may adjust for these circumstances in their decision-making. Close relations with dependency between analysts and representatives are expected to improve the exchange of information both in content and quality at the same time as it also decreases it. There is a risk that analysts act as megaphones for the companies.

Analysts’ work is to generate businesses for the firm. Novelties tend to be preferred since it generates businesses. Direct contacts and personal sources tend to be most important for providing value added information. Value added information includes novelty and possibilities to generate businesses. Direct contacts tend to increase the risk for exchange of insider information and thus the risk for inefficiencies on the strong level. They can at the same time be seen as making the market more efficient on the semi-strong level since investors become more informed, or at least the institutional investors. Information efficiency at one level may imply information inefficiency at another level.

One way to improve the investors’ possibilities of decision-making is to increase the knowledge about the biased information and the relations of dependency between analysts, companies and institutional investors. This may be especially important with naïve investors since they tend to overreact on information disclosed by experts. This study with mapping of analysts cognitive structures regarding the work with changes help to attention the contradicting situations influencing the analysts’ work and thus also the content of the changes. The invisible may not be obvious. What tend to be visible at first sight may not reveal the whole “truth”. Situations with changes have hopefully become less mysterious.

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84 Ashton & Ashton, p.23
85 Griffin and Twersky, 1992
References

Forsgren, M. & J. Johanson (1994) ”Managing Networks in International Business,” Gordon and Breach, USA
Rogers R.K, An Empirical Investigation of Financial Analysts' Sources of Information, Ph.D dissertation, Department of Accountancy, Case Western Reserve University, Cleveland, Ohio, January 1996

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