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Routine formation in the context of financial analysts: A strong structuration perspective

Introduction

While recent research into financial analysts has largely focused on areas such as the corporate communication process between analysts and listed companies (Arvidsson 2012); private interaction between firm management and sell-side analysts (Soltes 2014, Brown et al. 2015); valuation of intangibles (Holland 2003, Chen et al. 2014) and the role of investment analysts in CEO dismissal (Wiersema and Zhang 2011), the underlying processes by which analysts generate their reports and recommendations has been somewhat overlooked (Brown et al. 2015). This study addresses this research gap, by providing empirical evidence as to the routine nature of the work undertaken by financial analysts.

The important role played by financial analysts in the proper functioning of capital markets and maintenance of market liquidity renders them highly worthy of research (Cavezzali 2012, Brown et al. 2015). This informed group, represents the chief information intermediary between financial statement preparers and investors (Garcia-Meca and Martinez 2007, Simpson 2010), facilitating a credible information exchange between them (Arvidsson 2012). By way of their analysis work, earnings forecasts, and stock recommendations, financial analysts possess a sizeable influence over investors in search of information concerning the prospective value of securities (Orens and Lybaert 2007, Cavezzali 2012, Twedt and Rees 2012, Hobbs and Singh 2015, Rees et al. 2015).

Whereas Feldman and Pentland (2003) applied Giddens' (1984) theory of structuration theory in its original form to understand organisational routines, this study operationalises Stones' (2005) strong version of structuration theory, in examining how various social structures interact recursively with the agency of financial analysts, leading to the formation of new work routines and modifications to existing ones. To this end, it refines the use of

strong structuration theory by introducing the concept of the 'flowing' agent-in-focus which has not previously been articulated in other works.

This paper is organised as follows. The following section offers an overview of the literature pertaining to routines, along with a description of the nature of the work of financial analysts, to demonstrate its compatibility with the routines ontology. Thereafter, the theoretical background for this study, which builds on recent developments in structuration theory (Stones 2005) is outlined. Next, the research methodology, design and setting are presented. This is followed by a discussion of the key findings to emerge from this study. Finally, the contributions of this paper to the literature on routines, and strong structuration theory are discussed.

Routines

Usage of the label routine, in a variety of contexts, renders the phrase particularly difficult to define consistently, or precisely (Cohen et al. 1996, Feldman and Pentland 2003, Becker 2005a, Becker 2005b, Becker et al. 2005, Van der Steen 2008, Felin and Foss 2009, Parmigiani and Howard-Grenville 2011, Vromen 2011, Iannacci and Hatzaras 2012). Nonetheless, Felin and Foss (2009, p.158) observe, that all definitions of routines focus to varying degrees on 'order, repetition, interdependence and patterns'. Routines are ubiquitous, in that much of the work undertaken in organisations is performed in a routinised manner (Becker and Zirpoli 2008, Rerup and Feldman 2011). Countless routines exist (Becker et al. 2005), and they are insightful, in that they capture what is typical, for an organisation (Becker and Zirpoli 2008).

Routines exert a mainly positive influence on an organisation. They comprise stores of knowledge, explicit and tacit, initiated on a day to day basis (Burns 2000, Becker and Lazaric 2003, Becker 2004). The role of routines as mechanisms of coordination has been endorsed by many (Lazaric 2000, Feldman and Rafaeli 2002, Cohendet and Llerena 2003, Becker 2005a). Adoption of routines enables the performance of recurring events to be achieved semi-consciously, thus freeing up ones cognitive capacity to cope with less routine events (Becker 2001, Cohendet and Llerena 2003, Becker 2004). Accordingly, routines lend simplification and efficiency to tasks (Gersick and Hackman 1990, Feldman and Pentland 2003, Miller et al. 2012). Burns and Scapens (2008) maintain that routines help individuals

to understand what is expected of them, and in turn assist them in anticipating the actions of others. Regardless of such positive qualities, routines can also harbour a range of shortcomings including misinterpretation of stimuli, a disregard for the context, archaism, reduced search, and information confirmation biases (Gersick and Hackman 1990, Schulz 2008, Betsch and Haberstroh 2009, Pentland et al. 2011). To this end, Espedal (2006) observes that routines which may once have functioned as tools of efficiency appropriate to their environments, can all too easily diminish into modes of treacherous simplicity, lacking the flexibility needed to cope with changing environments, thus leading to sub-optimal outcomes (Schulz 2008).

Feldman and Pentland (2003) maintain that routines, like other social phenomena, represent a duality of structure (ostensive aspect), and agency (performative aspect) and that it is the interplay between these two aspects, that highlight the extensive role played by routines in bringing about change in organisations (Feldman and Pentland 2003, Howard-Grenville 2005, Rerup and Feldman 2011). They define routines as 'repetitive, recognizable patterns of interdependent actions, carried out by multiple actors' (Feldman and Pentland 2003, p.95). According to Feldman and Pentland (2003), the involvement of multiple actors introduces an array of goals, information, and interpretations, whilst the characteristic of interdependence of actions obscures, and indeed unlocks the boundaries of the routine to external influences. Thus, whilst organisational routines are recurring phenomena, these very qualities ensure that each performance of a routine differs to the one before it, to some extent. Even so, the routine retains a distinct facade, rendering it easily recognisable. Feldman and Pentland (2003) regard this duality as a fundamental ingredient in every routine. The key components of this definition will now be considered in more detail in the context of the work performed by financial analysts.
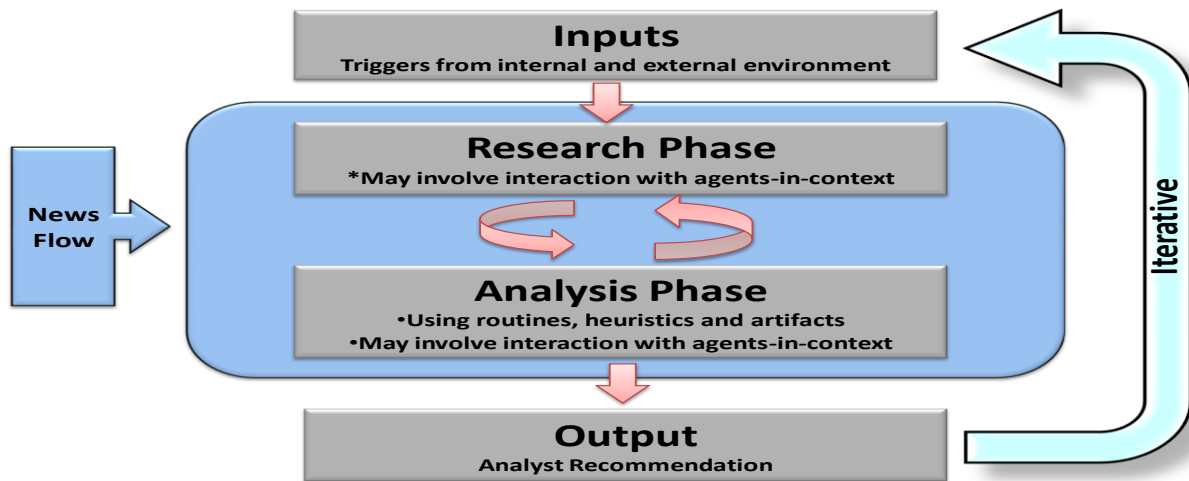
The routine nature of financial analysts' work
The research and analysis work performed by financial analysts bears the repetitive quality across time envisaged by Feldman and Pentland (2003). Just as Feldman and Pentland (2003, p.103) found that the hiring routine in their study had many manifestations even within a single organisation, it is appropriate for us to acknowledge the research and analysis work of financial analysts as a 'category with many instances'. However, while these instances may vary, they nonetheless display ample likeness to typify a recognisable category. Feldman and

Pentland (2003) explain that while each task may not feature in every enactment of a routine, and that the particular tasks involved in the enactment of a routine may be customised to the specific setting, it is still possible to recognise the fundamental pattern of the work at play.

In their explanation of organisational routines, Feldman and Pentland (2003, p.104) assert that interdependence is not restricted to the immediate actions of the agents, but that 'the parts of any routine are enmeshed in far-reaching, complex, tangled webs of interdependence' including external forces. This quality of interdependency dilutes individual agency, in that actions performed by one agent may in fact limit the freedom of other agents to do as they please. This observation is indeed true of the work of financial analysts. Their research and analysis work cannot be conducted in a vacuum. They must be cognisant of pertinent information items both locally and globally, which bear the potential to impact the companies and sectors they follow. To this end, they must communicate and coordinate with numerous parties, including work colleagues, company management, industry experts, the media and regulatory bodies. The very involvement of multiple actors invariably introduces variety, in terms of subjective understandings and differing objectives of the parties involved (Feldman and Pentland 2003). This dimension in particular bears the capacity to infuse change within routine performances over time, thus contradicting the notion of routines as being inertial, despite their recurring quality (Becker and Lazaric 2003, Feldman and Pentland 2003, Jack and Mundy 2013). This point was adeptly summed up by one of the anonymous Administrative Science Quarterly reviewers who observed that 'routines are like ruts in a well-traveled road. They do not exactly determine where the next wagon will go, but neither do they merely describe where past wagons have gone' (Pentland and Rueter 1994, p.508). A diagrammatic representation of the key steps involved in the work of financial analysts is presented in Figure 1.

Figure 1. Graphical Representation of Steps Involved in Analysts' Work

Inputs
Triggers from internal and external environment

News Flow

Research Phase
*May involve interaction with agents-in-context

Analysis Phase
•Using routines, heuristics and artifacts
•May involve interaction with agents-in-context

Iterative

Output
Analyst Recommendation

Note : Routine Duration – Ranges from Minutes to Weeks

Routines comprise a duality of structure and agency based on Giddens' (1984) theory of structuration. Feldman and Pentland (2003) draw on the concept of structure and agency to develop what they term the performative and ostensive aspects of a routine. The performative aspect pertains to how the routine is actually executed, or brought to life (Espedal 2006). The ostensive aspect reflects the more general narrative description of the routine (Pentland et al. 2010, Parmigiani and Howard-Grenville 2011). den Hond et al. (2012) explains that the ostensive aspect of a routine offers structure, by guiding behaviour, thus helping others to appreciate what should be done. It is the interplay between these two aspects that highlight the extensive role played by routines in achieving change in organisations (Feldman and Pentland 2003).

For example, den Hond et al. (2012) explain that while the agent may mindfully re-perform the routine as originally enacted, she may equally choose to deviate from the routine, to the point that the ostensive aspect becomes altered. This captures the agent's knowledgability and power to choose not to act as anticipated (Giddens 1984). Additionally, this recognises the non-deterministic nature of the relationship between structure and agency and the dialectic of control (Giddens 1984, Whittington 1992, Northcott 1998, Manson et al. 2001, Vaughan 2001, Stones 2005, Uddin and Tsamenyi 2005, Jayasinghe and Thomas 2009, den Hond et al. 2012, Englund and Gerdin 2014). Accordingly, understanding the interaction between structure (ostensive aspect) and agency (performative aspect) is central to our

understanding of routines as necessary dualities, and true sources of change, in organisations (Feldman and Pentland 2003).

Theoretical background

Owing to the perceived limitations of structuration theory in its original form, a revised, stronger framework of the theory developed by Stones (2005), entitled strong structuration theory, is employed in this study. While Stones' (2005) work retains the key strengths of Giddens' (1984) original framework, it enhances it, by providing the necessary methodological guidance to enable the theory to be effectively applied at the substantive empirical level, a quality which was regarded as lacking in Giddens' seminal work (Lawrence et al. 1997, Jack and Kholeif 2007). Giddens (1984) was preoccupied with the philosophical and abstract level, with a view to ensuring his theory was as universal as possible, to the detriment of epistemology and methodology (Stones 2005). In contrast, Stones (2005), by means of a meso-level ontology, successfully traverses the micro and macro levels. The benefit of this approach is that it offers a sliding scale on which to locate studies, which means strong structuration can facilitate a depth of contextualisation, via detailed concrete studies of individuals, right through to the more abstract outlines of historical and global occurrences (Jack and Kholeif 2007).

The essence of Stones' (2005, p.9, original emphasis) contribution to structuration theory is to clarify the nature of the elements embodied in the duality of structure, by considering the duality of structure as four inter-linked but analytically separate components namely, (1) external structures as conditions of action; (2) internal structures within the agent; (3) active agency and (4) outcomes. Collectively Stones refers to this as the quadripartite nature of structuration. Chan, Deave, and Greenhalgh (2010) explain that Stones' quadripartite nature of structuration encompasses both an etic and emic perspective in that it considers external structures independently of the agent's understanding of them and internal structures in terms of the agent's understanding of them. The aim of this model is to enhance our understanding of the power of external social forces to restrict an agent's ability to act (Stones 2005).

Research methodology, design and setting

Semi-structured interviews with thirty four financial analysts were conducted. A purposive sample was used to increase variability in the data, thus recognising the 'complexity that

characterizes human and social phenomena and the limits of generalizability' (Maykut and Morehouse 1994, p.56). The interview guide was informed by the work undertaken at a preliminary interview phase (five interviews) along with insights from the relevant literature. The interview participants originated from a range of financial services organisations such as stock broking houses, corporate banking, and fund or asset management institutions. The sample size of 34 was regarded as adequate on the basis of diminishing returns from data collection and saturation of information (Strauss and Corbin 1998). The interviews lasted on average, 42 minutes each, and were electronically recorded. Each was transcribed within a few hours of the interview to minimise data loss. Thereafter, coding of the data was performed using the NVivo qualitative data analysis package.

Five distinct phases of data analysis were undertaken as follows. The first phase encompassed broad open coding of the interview transcripts applying a thematic approach, informed by the routines literature. This was followed by an additional phase of broad open coding of the interview transcripts, this time employing Stones' (2005) quadripartite nature of structuration as a framework to organise the data in a way that supported a more focused analysis. The third phase involved drilling down into the themes produced during the second phase of analysis to identify sub-themes, thus resulting in the creation of a hierarchy of codes. The fourth phase involved establishing how the content heavy nodes from the previous phase spoke to the routines literature. The fifth and final phase consisted of writing up the research. Maykut and Morehouse (1994) consider this phase a key component of the analytic process in that the work associated with constructing the content and determining the arrangement of the findings entails further reflection on the data, thus bearing the capacity to produce additional insights.

Discussion
Flowing agent-in-focus
Stones (2005) explains that institutional groups demonstrating a degree of contingency in their relationship to one another, signify a desirable foundation on which to chart the setting in which specific processes of structuration occur. Accordingly, this study maintains that financial analysts represent a group bearing the degree of contingency in their relationship to each another that Stones (2005) deems attractive. This is because, regardless of their specific job titles or the various organisations they are affiliated with, financial analysts perform work

activities and routines, and are exposed to environmental influences that are broadly comparable in nature to those of their analyst counterparts. Thus, while many observe that financial analysts diverge on a several levels such as depth and scope of research work performed, information sources utilised and audiences targeted, they nonetheless acknowledge that they perform broadly similar functions (Groysberg, Healy and Chapman 2008, Groysberg, Healy and Serafeim 2013). The fact that the performance of buy-side and sell-side analysts has been measured against the same metrics is evidence, that they exhibit sufficient similarity, to be regarded as a distinct institutional cluster (Hobbs and Singh 2015). Similarly, the fact that the Chartered Financial Analyst (CFA) qualification is open for entry to all analyst types, confirms the overlap in their skill-sets, a shared value system, and in that way, contingency in their relationship to one another.

The particular structure-agency relationship considered in this study is the linkage between social structures and the actions of the different financial analysts, in influencing the behaviour of the agent-in-focus, at particular conjunctures. Stones (2005) maintains that the cycle of structuration is at work in many places concurrently, with agents differently situated relative to the explanadum, and therefore participating in the process of producing particular events or conjunctures to a greater or lesser degree. Through a position-practices perspective Stones (2005) takes into account the influence that the networked others have on the actions of the agent-in-focus.

In this scenario, the quadripartite conceptualisation of structuration occurs in many places simultaneously, with the agents differently situated relative to external structures. Thus, once the focus of analysis moves away from a particular agent-in-focus, she then becomes an agent-in-context for the subsequent agent-in-focus and in that way, serves as an external structure for that particular agent-in-focus. Coad and Herbert (2009) maintain that shifting the focus of analysis from one agent-in-focus to another facilitates the construction of a composite view of how external structural conditions influence the conduct of agents.

In this light, the agent-in-focus in this study is harnessed as a 'flowing' concept that moves continually from one analyst to the next, both within, and more significantly, beyond, a specific organisation. To this end, the participant on whom the lens of structuration is resting at any moment in time is deemed the agent-in-focus in the group under consideration. The

remaining interviewees, while not necessarily working in the same organisation as the agent-in-focus, are nonetheless regarded as potential agents-in-context for that specific agent-in-focus. This is made possible by the fact that the participants in this study demonstrate the necessary degree of contingency in their relationship to one another with which to employ Stones' (2005) methodological guidance, as evidenced by factors including their shared experience and understanding of being financial analysts. The concept of the 'flowing' agent-in-focus has not been articulated in other works of this nature and so represents a key methodological contribution to emerge from this study. The vocabulary employed to describe this concept gives the researcher greater clarity on how to create a composite view of the way in which external structural conditions influence the conduct of agents differently situated relative to their external structures. This is demonstrated next.

Application of Stones' Composite Research Strategy
Stones (2005, p.126, original italics) maintains that the composite strategy can be effectively drawn on to ascertain '*the histories of causal processes of structuration*' including 'a particular decision, interactional sequence, set of spatial or temporal arrangements, or event'. The nature of the question at the heart of this study centres on causation, in terms of routine formation and change in analyst organisations.

Stones (2005) methodological bracketing is drawn on in employing his composite research strategy. Accordingly, within the conduct analysis bracket the general-dispositional frame of meaning of the flowing agents-in-focus is identified. This leads on to a discussion of the conjuncturally-specific internal structures of the flowing agents-in-focus. For ease of reference, Giddens' (1984) original phraseology for these structures (signification, legitimation and domination) are used in this regard, whilst retaining the outward looking perspective advocated by Stones (2005). Also, while Stones' (2005) original framework suggests that a reflection on how the agent-in-focus regards her external structures may be undertaken within the conduct analysis bracket, in this study that reflection is instead deferred until those structures are identified via the context analysis bracket. This was considered useful to preserve the flow of the current study and to minimise duplication in terms of discussion of external structures.

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Internal Structures

Whilst Giddens (1984) refers to structures of signification, legitimation and domination, to indicate internal, virtual structures within the agent, Stones (2005) explicates these internal structures in terms of how the agent interprets situations bearing in mind the particular context, and how other agents in that same context would behave in those same circumstances. These represent virtual structures employed by the agent as the medium of action, when facing external structures. They capture how and what a person knows (Greenhalgh and Stones 2010, Miles 2012). More specifically, Stones (2005, p.85) classifies internal structures along two dimensions, namely, general-dispositional and conjuncturally-specific. Both general-dispositional and conjuncturally-specific internal structures represent knowledge built up over time, and knowledge obtained in the course of a particular interaction.

General-Dispositional Internal Structures

Jacob, Lys and Neale (1999) acknowledge the substantial explanatory power of an agent's general-dispositional frame of meaning on their ensuing conduct. In particular, Stones (2005) explains, that by focusing on an agent's general-dispositional internal structures, including the agents' world views, attitudes, habits and skills, which are largely taken-for-granted, and engaged instinctively by the agent, one gains an insight into how that agent perceives the world.

Accordingly, the general world views of the interviewees in this study reveal that whilst possessing a strong understanding of key areas including accounting, markets and business strategy is indeed valuable, the skill set involved is essentially one that develops on the job in line with experience. This was captured by Brian M., a credit-side analyst, who stated:

> Being able to filter the noise and able to focus on what's important, that's basically the key. And that comes from experience because, ability wise . . . everybody coming in here is able to do that equally if not better than the people who are in here *(Brian M., credit analyst, credit investment manager firm)*.

This conveys the appreciation Brian M has of the likeness of his skill set and that of his agents-in-context as well as his understanding of how to differentiate himself from them.

Conjuncturally-Specific Internal Structures

Giddens' (1984) structures of signification, legitimation and domination were applied in this study to analyse the conjuncturally-specific internal structures of the agents-in-focus but the outward looking perspective advocated by Stones (2005) was retained. Accordingly, in terms of structures of signification, information sources represented the key structures of signification retained by the agents-in-focus to produce and reproduce meaning.

For example, team members through on-the-job training were frequently drawn on by the agents-in-focus in their day to day routines to establish meaning and to support their recommendations. A significant benefit associated with this type of learning experience is that it presents the agent-in-focus with a strong sense of what the agent-in-context might be expected to do in similar situations going forward (Stones 2005). However, the purpose of this learning approach is not to inhibit the development of the agent-in-focus but rather to expose them to a methodology to facilitate their understanding, but which may subsequently be elaborated on by that agent-in-focus as the conditions of action alter. Rowan, a buy-side analyst with 15 years experience, verifies this as he describes his initial learning experience on joining his organisation and how the exchanges he had with his manager, served as a structure of signification for him. He explains:

> When I started I was allocated to the manager who interviewed me for the first couple of years. He would have spent time kind of giving me his opinion about how to do the job . . . of what was important, and what wasn't. *(Rowan, buy-side analyst, fund / asset management business).*

Similarly, Tom, a sell-side analyst in a different organisation to Rowan, confirmed this particular practice, adding:

> The main learning is probably done through CFA and through just learning on the job. You know . . . just writing reports every day and doing valuations and seeing how it's done differently by different analysts and that kind of thing *(Tom, sell-side analyst, full service investment firm).*

Clearly, Rowan and Tom would emulate much of what they learned originally from their more knowledgable and experienced agents-in-context, for many months, subsequent to joining their respective organisations, owing to them being motivated by a need to reduce anxiety and to preserve ontological security (Giddens 1984). However, in keeping with a

major assumption of structuration theory that agents are knowledgable and reflexive (Dillard and Yuthas 2002, Jayasinghe and Thomas 2009, Englund et al. 2011), they would, with the passage of time, and through gaining experience, eventually come to develop their own work styles, a point conveyed by Rowan:

> So your mentor can try and relay what he thinks is important, and personally I think that's a very valuable way of doing things, but ultimately I would concede and I think that's what the company recognised at the time, that people have to find their own way of doing things *(Rowan, buy-side analyst, fund / asset management business).*

What is interesting here, is that while Rowan and Tom evidently originate from different organisations, and represent different analyst types, they nevertheless report very similar experiences concerning developing their conjuncturally-specific knowledge. By extending the reach of strong structuration theory to include consideration of a variety of analyst types, both within and across the organisational boundary, a broader understanding of this institutional cluster is achieved. Similar examinations of structures of legitimation and domination in this study uncovered further insights.

External Structures

External structures represent the acknowledged and unacknowledged conditions of action of the agent-in-focus (Jack and Kholeif 2008). They include the complex array of position-practice relations (e.g. vertical and horizontal) in which the agent-in-focus is entangled (Stones 2005). Stones (2005), via a position-practices perspective, acknowledges that external structures pre-exist, and exist autonomously of the agent-in-focus, but that reproduction of these structures, or changes to them, necessitates action on the part of the agent. In addition, the values and the knowledge base of organisational agents are impacted by external structures (Greenhalgh et al. 2014). Stones (2005) draws attention to the ability of external structures to limit the agent's freedom, in an effort to dispel the suggestion that structuration theory is excessively voluntaristic. To this end, he classifies external structures as either '*independent causal influences*' or '*irresistible causal forces*' (Stones 2005, p.111, original emphasis). Independent causal influences capture the situation where external structures are established, replicated or modified, independently of the wishes of the agent, even though they may have a direct impact on the agent's life, whereas irresistible causal forces represent value-dependent influences.

The key external structures that were in common across the structural contexts of the flowing agents-in-focus in this study included their immediate work environments, news flow dynamics, work routines and pressures from the external environment. These external structures represented a range of independent causal influences and irresistible causal forces, along with their associated position-practice relations.

Some of the analysts asserted that a team culture was not something that was commonplace in this industry and consequently, they themselves were taking the initiative to develop that type of culture in their respective organisations owing to the perceived benefits a team structure may confer. To this end, Stephen, a bond analyst, with previous experience in the field of management consulting, explained that a team ethos was not an attribute he readily associated with firms in the financial services industry but that this was something he intended to alter. Accordingly, he gave a personal undertaking to promote a team culture in terms of on-boarding newly recruited analysts. He explained:

> Having not worked in finance previously there is a far greater team ethic in non-financial firms than in financial firms . . . I think that's across the industry. It's not a team oriented sector. On our team, there really has only been two of us to date and we do very, very different things. I try to interact with him. But I've brought on a new guy to work directly under me. So, absolutely that will be a team I'll be developing *(Stephen, sell-side bond analyst, stockbroking, wealth management, financial advisors firm)*.

This suggests that Stephen understands the value that a team configuration can offer based on his past experience and so he plans to develop this culture in his immediate work environment. He is already making efforts to interact with his existing work colleague. However, the manner in which he talks about this experience suggests that he is encountering difficulty in getting his colleague to engage with him. The fact that Stephen and his existing work colleague appear to be situated at a comparable level in the associated web of position-practice relations suggests that Stephen does not possess sufficient power over him to cause him to interact with him in a collegiate fashion (Coad and Herbert 2009). Because Stephen and his direct agent-in-context were each responsible for 'very different work' this may suggest that it was not actually necessary for them to interact closely. Accordingly, it seems

that the resistance experienced by Stephen was neither an independent causal influence nor an irresistible causal force.

While Stephen's organisation represents an example of one where team culture is gradually being acknowledged as important, many of the flowing agents-in-focus already recognise the importance of a team ethos and collaboration. While the analysts interviewed explained that they undertake a substantial component of their work independently, they also advised that teamwork in the form of informal and formal discussions and team meetings concerning stock opportunities is important. The agents-in-focus clearly understood the merit of engaging in discourse with their work colleagues. To this end, Peter, a senior buy-side analyst, described the capacity of his team members to operate both autonomously and as part of a cohesive unit as dictated by the underlying circumstances:

> Within my team I'm the head . . . We set the tasks in terms of what we're going to cover each week and then I just let people get on with it. And then when they come to their conclusions, we sit down and go through it all before we make a final decision and just challenge each other internally. But they don't have any issue picking holes in my work. It's very collaborative. It's very flat - the environment. I just have to take responsibility! *(Peter, buy-side analyst, fund / asset management business)*.

Accordingly, a secure team structure offers the agent-in-focus the opportunity to present her ideas to her adept agents-in-context in a secure environment, thus promoting her sense of ontological security (Giddens 1984). Additionally, it gives the agent-in-focus a sense of what the agent-in-context might be expected to do in the same situation, bearing in mind whatever else can be construed about what she did in previous situations (Stones 2005). Similarly, the flatter the structure of the team, the more conducive it is for less experienced agents-in-context to actively and unreservedly engage in the regular exchange of ideas, thus developing their experience and knowledge. In this context, Peter alternates between two positions in his web of position-practice relations (Stones 2005). By suppressing his positional power and playing the role of team member, Peter operates at an equivalent level to the agents-in-context on his team in terms of examining different stock opportunities, collaborating with them and challenging their views, with the aim of selecting the best investment options. In this juncture, there is no distinction between Peter and his direct agents-in-context. When the hierarchy of authority is not obvious, lower level team members feel more at ease and

empowered to contribute their ideas and challenge the views of their team members (Zaccaro et al. 2001).

As team leader however, Peter also occupies a senior role in his web of position-practice relations and so is responsible for factors such as team outcomes, access to key resources and influencing the team philosophy (Zaccaro et al. 2001). Regardless of this position of authority, Peter is nonetheless dependent on his team members to comply with his instructions, to realise the overall aims of the team. On that basis, as long as the behaviour of the team members is compatible with the team ethos and expected practice, he allows his colleagues to perform their work in a largely unfettered manner. However, as Giddens (1984, p.16) maintains, 'all forms of dependence offer some resources whereby those who are subordinate can influence the activities of their superiors'. For instance, the subordinate analysts have the agency or power to choose whether or not to follow the rules. In the event of them choosing to 'act otherwise', this threatens the sense of ontological security developed within the team (Giddens 1984). In that scenario, Peter retains the capacity to draw on his positional power to redefine himself as team leader by taking control of the situation and suppressing deviant behaviour, thus reinforcing power relations within the team.

The team dynamic is far more powerful in Peter's team, where he and his direct agents-in-context all strive to support each other, in identifying the best investment options. They are all working towards a common goal, but Peter, as team leader still retains the positional power to impede undesirable behaviour. In that scenario, the working environment represents an irresistible causal force in that it is a value-dependent influence (Stones 2005). Through an implicit contract the agent-in-focus agrees with the agents-in-context on her team, to subscribe to a particular investment style and philosophy. While the agent-in-focus always bears the capacity to reject this philosophy via Giddens' (1984) dialectic of control, in doing so, her position in the organisation becomes largely untenable, meaning she is likely to jeopardise her current ability to meet her basic needs (Stones 2005). This is a potential outcome the agent-in-focus will wish to avoid. It is a team culture akin to that created by Peter that Stephen hopes to develop in the team he has commenced building.

Active Agency

Active agency, captures how the agent-in-focus draws either routinely or strategically on her internal structures (both general-dispositional and conjuncturally specific) as a medium of action in response to external structures (Greenhalgh and Stones 2010). The particular way in which the agent responds in a given conjuncture is dictated by several factors. Many of these factors are not ascertainable with certainty in advance, but instead depend on the horizon of action, the particulars of the context involved, and time and space constraints (Stones 2005, Greenhalgh and Stones 2010).

Stones (2005) recognises five aspects of active agency relevant to achieving an appropriate understanding of the nature and dynamism of an agent's conduct. These aspects are essentially an enrichment of Giddens' (1984) stratification model of the agent in order to reflect a more complex agent. Accordingly, Stones' (2005) contribution, acknowledges that agency is impacted by (1) the nature of the strategic terrain encountered (external structures), (2) how the agent regards the situation (internal structures), (3) the extent of critical reflection exercised by the agent, (4) conscious and unconscious motivations of the agent, and (5) the process of prioritising projects. Given that the first two aspects have already been considered at length, the remaining three aspects will now be examined.

Extent of Critical Reflection Exercised by Agent

The extent of critical distance and reflection considers the degree to which the agent-in-focus actually reflects on her own actions. This third aspect of active agency offered by Stones (2005) is consistent with the first dimension to Giddens' (1984) stratification model of the agent termed 'reflexive monitoring of action'. Giddens (1984) maintains that agents are constantly engaged in reflexive monitoring of what they are doing, how their networked others react to that, how their networked others act, and the conditions in which the action and reaction occurs (Granlund 2003, Coad and Glyptis 2014). Accordingly, the outcome of the process of structuration is in fact mediated to an extent by reflexive monitoring (Coad and Glyptis 2014).

For example, Stephen a sell-side analyst maintains that one only need observe one's networked others to realise that they too are constantly engaged in reflexive monitoring. Analysts he asserts are constantly challenging their own thought processes to ensure that the

rationale underlying their recommendations is strong enough to withstand subsequent scrutiny by their networked others. Accordingly, engaging in the practice of reflexive monitoring offers Stephen and his agents-in-context a sense of ontological security (Giddens 1984). Stephen explains that reflexive monitoring is an activity that he and his networked others constantly performs, for good reason:

> You can shadow someone more senior, who's successful at it for a while to see that they're constantly having to challenge things. They're constantly having to answer their own questions to the best of their own ability with whatever information is out there. And if they know it's not perfect . . . that's ok, because they've arrived at it in a very thought out manner, and that gives them an assumption that with all the available knowledge that they have, it can't really be challenged *(Stephen, sell-side analyst, stockbroking, wealth management, financial advisors firm)*.

This account provided by Stephen also demonstrates that the practice of reflexive monitoring is an activity that the agent-in-focus equally expects her agents-in-context to perform in respect of their own activities (Stones 2005).

Additionally, whilst reflexive monitoring tends to concentrate on past occurrences, it also bears a future orientation whereby analysts may anticipate possible consequences of future actions based on past events (Coad and Glyptis 2014). Johnny, a credit analyst, captures the capacity of the agent to learn from the past but also to project this learning forward in so as to inform future investment recommendations. He explains:

> If you wrote a credit paper and we subsequently lost money on that, you would look at that paper and see what went wrong. Did we analyse the company correctly? If so, and the company underperformed, that's fine. Or is it a case that we missed something in that analysis? Did we not see a change in technology impacting the sector or impacting the company? Then, is that potentially to be implied in another sector? *(Johnny, credit analyst, credit investment manager)*.

Thus, learning on the part of the agent-in-focus is facilitated by engaging in reflexive monitoring of what they themselves are doing, how their networked others react to that, the actions of their networked others, and the conditions in which that action and reaction takes place (Coad and Glyptis 2014). Furthermore, by engaging in reflexive monitoring Johnny and his agents-in-context are better placed to avoid repeating past mistakes and to actively consider the implications of past events for other companies and sectors into the future.

Conscious and Unconscious Motivations of Agent

What Stones (2005, p.101) terms 'conscious and unconscious motivations', Giddens (1984, p.5) labels 'motivation of action'. This aspect of active agency captures the impetus prompting the agent to take action (Giddens 1984). Stones (2005) explains that this motivation may be purposeful or routine; straightforward or complex; conscious or unconscious; or a combination of these. To this end, David J, a sell-side analyst, provides that he and his agents-in-context are both consciously and purposefully motivated by a desire to build a good reputation in their industry owing to the range of opportunities this can open up. He explains this as follows:

> If you're serious about what you're trying to do, then over time you can create a reputation for yourself that really provides a platform for you to do other things over time . . . if you are a good research analyst, doors open. It works both ways. The company also benefits from having you work for them. And at the same time it opens doors for the individual analyst. As a platform to learn and as a platform to network and as a platform to actually have a say in terms of policy over time . . . it presents a big opportunity *(David J, sell-side analyst, stockbroking, wealth management, financial advisors business)*.

Sorting Priorities into a Hierarchy of Purposes

The fifth and final element of active agency involves sorting out priorities so that the various projects or concerns being handled by the agent-in-focus in the same or separate fields are brought together into a hierarchy of purposes (Stones 2005). Bringing projects together in this manner does not signify a lack of tension between the different concerns and may be performed more or less instinctively or deliberately (Stones 2005). Prioritisation of tasks is especially important for this particular institutional cluster owing to their highly volatile conditions of action and the vast quantity of information they are expected to process. Doing so helps the agent-in-focus to allocate the very limited time at her disposal as effectively as possible by focusing on what she regards as more important. The process involved in sorting priorities is not a one-off exercise. Rather, it is recurring in nature, requiring analysts to constantly review and revise their priorities as their conditions of action change. Key internal and external structures that analysts draw on to this end, range from simple mental short-cuts to more formal stock screening systems.

Holland (2005) explains that cognitive limitations of analysts cause them to simplify procedures where possible and develop cognitive rules-of-thumb or heuristics (Bingham and Haleblian 2012) to handle comparable issues. To this end, many of the flowing agents-in-focus in this study revealed that they regularly draw on mental checklists to help them prioritise their concerns. Frequently, such rules-of-thumb are conditioned by prior experiences, particularly, negative ones (Bingham and Haleblian 2012). To this end, Brian M, a credit analyst, explains that heuristics originate from both the first hand experience of the agent-in-focus and the shared experiences of her agents-in-context:

> So, we'll say for instance, if you lost money in a particular sector, you'd be very slow to commit capital to those sectors again. So I would say those rules-of-thumb have come from previous experience both personally, and as a firm *(Brian M, credit analyst, credit investment manager firm)*.

However, while useful and economical, over-reliance on heuristics may result in analysts inadvertently overlooking material information (Tversky and Kahneman 1974, Elstein 1999). Stephen, a sell-side analyst, provides evidence of this risk in practice, as he offers an example of a selection heuristic he regularly draws on:

> If they (clients) are only asking certain things, you focus on that *(Stephen, sell-side analyst, stockbroking, wealth management, financial advisors firm)*.

This demonstrates how an overreliance on heuristics bears the capacity to undermine the recommendations of analysts (Hammond et al. 2006). Holland (2005) explains that a failure to focus on a complete set of information results in bias being introduced. That being the case, others maintain that an awareness of the limitations of heuristics offers the best form of defence as it is then that one can build in tests to their decision making processes to address such limitations (Elstein 1999, Hammond et al. 2006).

Outcomes

The final component of the quadripartite cycle of structuation, termed outcomes, refers to impact on external and internal structures and events of the agent's action (Stones 2005). Accordingly, outcomes are the results of active agency (Coad and Herbert 2009) meaning consideration of them will also offer insights into the process of active agency. Outcomes may be deliberate or unintended and they feed back on the extant internal and external structures by changing, elaborating, or faithfully reproducing and preserving them (Stones

2005, Greenhalgh and Stones 2010, Miles 2012). While outcomes may emerge from the cycle of structuration in the form of preserved or altered internal and external structures they can also materialise as actual events in their own right. Thus, outcomes in the form of changed or preserved structures and events form the basis for subsequent cycles of structuration (Coad and Herbert 2009).

A key outcome of structuration in this study emerged in the form of a new routine known as the '30/30/30 list'. The circumstances that led to the creation of this outcome offers significant insights to the process of how new structures of signification and legitimation are created within analyst organisations and how routines are formed. The 30/30/30 list was inspired by Rory, a colleague of Richard who is one of the flowing agents-in-focus in this study. Richard and his agents-in-context were frustrated by the fact that many of the stock recommendations they submitted to their boss for consideration were more often than not met with his disapproval. In an effort to reverse this trend, Rory performed an examination of the existing portfolio in a bid to understand why the stock recommendations it contained met with his bosses' approval. This exercise led to him uncovering three specific criteria that were in common across all the stocks that avoided rejection. Initially, the three criteria were put into operation informally on a test basis by Rory and his networked others as a simple selection heuristic which helped them to identify particular stock opportunities to pursue (Bingham et al. 2007, Bingham and Eisenhardt 2011). Once its value was confirmed through use and experience, it was subsequently re-packaged by the marketing department as a more formal interpretative scheme (structure of signification) and structure of legitimation termed the '30/30/30 list' which all stock recommendations were thereafter required to satisfy. Richard explains the requirements of the 30/30/30 methodology as follows:

> So the way it works is - we screen stocks that have a 30 per cent discount to the market in terms of P/E, a 30 percent premium to the market in terms of dividend yield but yet are off 30 percent from their 18 month high. I did the list on Tuesday and it gave me a list of 150 stocks *(Richard, buy-side analyst, fund / asset management business).*

The above is an example of the role played by agents in creating practical structures of signification and legitimation as events in their own right. It also demonstrates that routines and in turn capabilities are built upon structures such as selection heuristics (Bingham et al.

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2007). Accordingly, organisational members, by translating their experience into shared heuristics for opportunity capture, contribute to the development of high performing processes, routines and capabilities (Bingham et al. 2007, Felin et al. 2012). The 30/30/30 list served as a powerful structure of signification, helping analysts to make sense of organisational activities (Busco 2009) and providing support for their decisions.

Contributions

This research makes three important theoretical and methodological contributions. Firstly, an examination of the outcomes of the structuration process in this study offers a number of valuable insights into the behaviour of financial analysts. Principally, it reveals a routine quality to the work that they perform, but it also offers useful evidence on how routines are formed, and thereafter changed or reproduced in their respective organisations. In that way, this study responds to the calls of Felin and Foss (2011) who commented on the lack of research focused on specific groups of agents involved in routines and D'Adderio, Feldman, Lazaric and Pentland (2012) who remarked on the limited research focusing on routine creation.

Secondly, the use of strong structuration theory in this work reveals the significant role played by team dynamics and team relationships in routine formation and routine sharing in financial analyst firms. This is an important insight to emerge from this study, as there is an inclination to assume that routines are simply designed and imposed on agents, rather than occurring through active agency and relationships.

Thirdly, in terms of methodological contributions, this study introduces the concept of the 'flowing' agent-in-focus. To this end, the agent-in-focus is harnessed as a flowing concept which moves continually from one agent to the next, both within individual organisations, but also across different firms, in the industry. Accordingly, the financial analyst on whom the lens of structuration rests at any moment in time is regarded as the agent-in-focus under study. The remaining interviewees, while not necessarily working in the same organisation as the agent-in-focus, are nonetheless deemed to represent potential agents-in-context for that agent-in-focus. This is because financial analysts demonstrate the necessary degree of contingency in their relationship to one another with which to employ Stones' (2005) methodological guidance. This contingency is borne out by factors such as their shared

experience of being financial analysts. The language employed to describe this concept offers the researcher direction on how to create a composite view of the way in which external structural conditions influence the conduct of agents, differently situated relative to external structures. In deploying Stones' (2005) composite research strategy, the sequence of the steps suggested by Stones were modified to minimise duplication and to preserve the flow of this study. To this end, the reflection on how the agent-in-focus regards her external structures was deferred until those particular structures were identified via the context analysis bracket. Jack and Kholeif (2007) advise that Stones' framework is an approach more so than a prescription for undertaking fieldwork. Accordingly, we consider that this modified approach may well prove useful in future studies of this nature.

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