A Study of How Behavioural Finance Theory Applies to the Senior Management Decision-Making Process in M&A

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Abstract

The purpose of this study is to construct a multi-factor behavioural model which can be applied to the research of behavioural trends in senior managers’ decision-making processes in M&A. Based on the academic analysis of Shefrin, Greenspan and empirical observations, a multi-factor behavioural model was constructed, in which the major factors were determined as ‘confirmation bias’, ‘information availability’, ‘illusion of control’, ‘affect heuristics’, the ‘human factor’ and the ‘individual investor behavioural model’. The existence of these factors in the senior management decision-making process was tested empirically by carrying out semi-structured interviews with senior practitioners in the M&A industry. The multi-factor behavioural model was extended to include two new behavioural factors: ‘risk aversion’ and ‘personal legacy’. These factors were displayed by senior managers by their tendency to evaluate the effect of a potential deal on their own welfare before initiating any M&A transaction, and only then conducting a risk-return profile assessment.

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1 Introduction

Aside from some well-known research about the role of hubris – or management ego – as a driver for merger and acquisition (M&A) deals, most of the literature and writing on the drivers of these deals consider that managers and boards are rational decision-makers; other studies look at external drivers, such as economic and financial factors. The relatively new field of behavioural finance has not yet been applied to M&A in detail. Through a series of interviews with M&A practitioners, we have concluded that there are significant psychological and behavioural drivers of deals that may be as critical as more ‘rational’ factors.

1.1 The relevance of behavioural finance to M&A

From a research perspective, the study of acquisitions has been influenced predominantly by the fields of economics, finance and strategy. Human behavioural factors have been largely ignored despite the fact that most researchers in M&A agree that the success rate of these deals is dismal and typically found to be no greater than 30-40% (Moeller & Brady, 2007).

Although behavioural finance as a subject might be viewed as a relatively new approach to the analysis of financial trends, its roots derive from as early as Adam Smith’s work in the 18th century. The modern application of behavioural phenomena related to the finance sector really started in the early 1970s, growing in popularity after each financial crisis when other theories had failed to predict the markets adequately. Tversky and Kahneman (1974) conducted studies showing how loss aversion and other psychological factors can distort one's financial judgment and Shefrin (2002) demonstrated how psychological phenomena impact the financial behaviour of individuals. Meanwhile, Shiller (2005) drew attention to volatility in financial markets as well as market bubbles, arguing that the majority of investors make irrational decisions because of
psychological factors such as herd behaviour and ‘epidemics’ which he concludes to be ‘irrational exuberance’. The most famous study to apply behavioural finance to M&A is Rolls’ seminal study in 1986 which analyses the concepts of managerial overconfidence (‘hubris’) and managerial optimism. This study has been used to explain why managers continue to pursue mergers or acquisitions even when the evidence is so overwhelming that most such deals fail.

Other research in this area has revealed greater complexity and further behavioural factors which influence investors or managers in their decision-making. These can be organised into a number of categories and, in this article, we will use the Kahneman, Slovic and Tversky (1992) system which focuses on ‘biases’ (a predisposition toward error) and ‘heuristics’ (rules of thumb used to make a decision). The selection of certain factors within these broad categories is based on the co-authors’ experience in M&A and is supported by the interviews.

1.2 Objectives of the study

Due to the lack of academic literature on senior management’s M&A decision-making processes using a unified factor model, this study aims to contribute by creating a behavioural factor model and testing it by empirical research.

Firstly, this paper aims to analyse diverse modern behavioural finance theories and existing research which explains senior management’s behaviour in the corporate finance world. Secondly, it aims to construct a multi-factor behavioural model which can be used as a tool to research empirically senior management’s decision-making processes in M&A. Thirdly, the aim of this research paper is to apply the multi-factor behavioural model empirically for the analysis of senior managers’ decision-making processes. And lastly, this paper aspires to discover behavioural trends which potentially derive from the managerial decision-making process.
1.3 Structure and methodology

We will first present an overview of academic literature. Based principally on the analysis of two academic theories (Shefrin, 2002 and Greenspan, 2009) and the insights of one empirical study (Hunt et al., 1987), supplemented by other research, the multi-factor behavioural model is constructed.

Secondly, we will present the empirical research, which was carried out using a semi-structured interview process. The multi-factor behavioural model was used as a foundation stone for the interview framework. There were seven interviews carried out with senior managers in M&A industry during this study, complemented by the observations of the two co-authors who together have over 35 years in the M&A industry.

Finally, we shall present the conclusions drawn from the analysis of the literature review and the empirical research, explaining the limitations of the study as well as presenting some recommendations for the continuation of the research subject.

2 Literature review

2.1 Behavioural corporate finance: biases and heuristics

Behavioural finance literature and studies reveal several dimensions which influence investors’ decision-making processes, classified into three major categories. The first two are biases and heuristics. There is also a third category – framing effects – will not be researched in this particular study as the preliminary interviews revealed these as less critical in an M&A context.
Based on Shefrin’s (2007) definitions, this study will adhere to these categories as follows:

a. Bias – a predisposition toward error

b. Heuristics – a rule of thumb used to make a decision

Exhibit 1 presents a summary of the dimensions which are found to influence investors’ decision-making processes from research into behavioural finance and psychology.

2.2 Biases and heuristics: conceptualisation and context

Following Shefrin (2007)’s classification, the study analyses different dimensions of behavioural finance. Very little literature exists on some factors and very few have been analysed in the light of mergers and acquisitions.

*Excessive optimism and overconfidence* has been extensively researched in works of Roll (1986), Malmendier and Tate (2002), and Goel and Thakor (2002). These studies analyse management expectations as a driver of M&A activity in the context of ‘hubris’ as a concept of one’s ego. It states that managers are overconfident, tend to overestimate potential synergies and underestimate the risks associated with deals. Managerial optimism and overconfidence are most likely the factors to which closest attention has been paid in academic literature.

*Confirmation bias*, according to Montier (2002), is the term used for people’s desire to find information which agrees with their existing pre-conceptions. In other words, it is a cognitive bias whereby one tends to notice and look for information which confirms already existing beliefs and ignores anything which contradicts them. Podell and Soodak (1993) have extensively analysed this bias effect in educational psychology. Arce and Farina (2005), as well as other
researchers, have outlined the importance of confirmation bias from a forensic psychology perspective.

However, there is little literature on whether and how confirmation bias influences senior managers’ decision-making processes in corporate finance.

**Illusion of control** is another important behavioural factor, described by the psychologist Ellen Langer as early as 1975. From a behavioural perspective, this bias has been researched by Kahneman and Tversky (1982), Roll (1986), Baker et al. (2004) and others. As outlined by Thompson (1999), it is the tendency that “people overestimate the ability to control events, for instance to feel that they control outcomes that they demonstrably have no influence over”. It is important to note that most of the time it is being analysed alongside the other biases of overconfidence and managerial optimism. This study looks at whether such a bias exists separately and if it appears to influence the decision-making process of senior management in M&A deals.

**Representativeness heuristics** as a concept was introduced by Tversky and Kahneman in 1974, and states that people tend to categorise events as typical or representative of a well-known type. Furthermore, they noticed a tendency to overestimate the importance of such events, sometimes ignoring the empirical evidence. Shiller (1997) and Shefrin (2002) trace representativeness heuristics in the context of researching the overconfidence of investors, stating that in certain cases one tends to be confident in believing that random data is following a particular pattern when in reality it is not. Thaller and De Bondt (1995) prove the existence of such heuristics in financial decision-making in the corporate world. However, no evidence was found in the
academic literature presenting the effect that such heuristics have on senior managers’ behaviour in M&A.

**Availability of information** is a cognitive heuristic in which a decision-maker relies on knowledge that is readily available, rather than taking the effort to examine other alternatives. Tversky and Kahneman (1973) have analysed such heuristics in the light of cognitive psychology relating to the judgement of frequency and probability. Schwartz et al. (1991) and Carroll (1978) have extensively researched the availability of the information heuristic in relation to the psychology of intuitive judgement of an event based on easily accessible information. However, the only study which has looked closely at information availability heuristics in relation to managerial decision-making in M&A was presented by Shefrin (2007) in an in-depth analysis based on a case study of a single M&A transaction.

**Anchoring and adjusting** has been defined by Shefrin (2007) as the process of people forming an estimate by beginning with an initial number and adjusting it to reflect new information or circumstances. However, people tend to make insufficient adjustments relative to that number, thereby leading to an anchoring bias. Such biases are closely related to the valuation of transactions and thus do not fall under the research object of this study, although in other aspects they could relate to M&A valuation. They will not be analysed further in this research.

Researching the **affect heuristic**, Slovic et al. (2002) state that affective human behaviour responses may occur rapidly and automatically, noting how quickly people sense feelings associated with the stimulus words ‘treasure’ or ‘hate’. Thus, they argue that reliance on such feelings can be characterised as the affect heuristic. However, based on a case study of a senior
manager’s behaviour during the decision-making process in M&A, Shefrin (2007) defines affect heuristics as ‘basing decisions primarily on intuition, instinct, and gut feeling’.

Based on a contextual and conceptual overview and the initial interview findings, this study focuses on Affect Heuristics, Information Availability, Confirmation Bias and Illusion of Control.

2.3 Individual investors’ behavioural model

Psychotherapist Greenspan in his book *Annals of Gullibility* (2009) presents a four-factor model explaining the act of an irrational investor’s behaviour. The four factors are distinguished as situation, cognition, personality and emotion. Individuals differ in the weight of these affecting any given irrational act. While it is likely that all four factors contribute to an individual investor’s decision-making process, in some cases certain aspects tend to influence behaviour more than others.

**Situation:** As Greenspan states, every act occurs in a particular micro-context, in which an individual is presented with a social challenge that he has to solve. In the case of a financial decision, the challenge is typically whether to agree to an investment decision which is being presented as benign but that may pose severe risks or not be in one’s best interest. Assuming that the decision to proceed would be a very risky and thus foolish act, gullible behaviour is more likely to occur if the social and other situational pressures are strong and less likely to occur if they are weak, or balanced by countervailing pressures such as having advisors to give counsel.

**Cognition:** Greenspan further states that gullibility can be considered a form of stupidity, so it is safe to assume that deficiencies in knowledge or clear thinking often are implicated in a gullible act. By terming this factor ‘cognition’ rather than ‘intelligence’, Greenspan intends to indicate
that one can have a high IQ and still prove gullible. Academics such as Shermer (1997) and Piattelli-Palmarini (1994) also show how often people of average and above-average intelligence fail to use their intelligence fully or efficiently when addressing everyday decisions. Stanovich (1999) makes a distinction between intelligence (the possession of cognitive schemas) and rationality (the actual application of those schemas). The ‘pump’ that drives irrational decisions, according to Stanovich, is the use of intuitive, impulsive and non-reflective cognitive styles, often driven by emotion.

**Personality:** According to Greenspan, gullibility is sometimes equated with trust, but the psychologist Rotter (2009) found that not all highly trusting people are gullible. The key to survival in a world filled with fraudulent scams (such as Madoff’s Ponzi scheme) is to know when to trust and when not to. Greenspan (2009) states that:

‘The need to be a nice guy who always says “yes” is, unfortunately, not usually a good basis for making a decision that could jeopardize a company’s financial security as well as its future stability’.

**Emotion:** Greenspan distinguishes emotion as one of the key factors influencing individual investors’ behaviour. According to his research, emotion enters into virtually every irrational act.

Overall, Greenspan’s presented individual investor behavioural model is a unique model which in this study is applied to a manager’s, as an individual’s, behaviour to support or reject the perception of irrationality during the decision-making process of senior management. Greenspan’s model relates to ‘affect heuristics’ to a large extent, emphasising that emotions and feelings tend to influence heavily one’s decision to invest.
2.4 ‘Human Factor’

Hunt et al. (1987) research a sample of over 100 senior CEOs who played a key decision-maker role in multiple M&A transactions. They asked them to discuss the reasons which triggered the decision to merge or acquire.

The following responses were presented:

‘Why did we go after them? There’s the obvious business reason: to get an increased share of the market. But we could have got that from someone else, maybe for less effort. The defensive reason: to prevent a competitor getting them? True, but not quite. If I’m honest, the real reason is that there is something tremendously satisfying about taking a company from a rival and being seen to have turned it round in a very short term… The chairman wanted to put one over on the other side, and our production people wanted to prove they could do it. It was a high risk strategy, but worth it if we could pull it off’. (CEO, Consumer Products)

‘When you ask for reasons, do you mean “business school” reasons or “real” reasons?’ (MD, Electronics)

There is a consistent stereotype of what stages form a decision to acquire. It commonly consists of the company having a set of well defined acquisition objectives derived from its corporate strategy and a small set of key people such as an acquisition manager, corporate strategist and board of directors who will evaluate the target companies and pass the information to the rest of the specialist team. These in turn would perform a lengthy and very detailed analysis on and projections of the target company. The final decision is entirely based on this analysis: clinically cold, rational, devoid of sentiment, emotion or self-interest. However, more than a third of
respondents were observed to be opportunistic judging from their statement: “it was there and we grabbed it”.

The great majority of the examined companies hardly resembled the stereotype. Targeting was often haphazard (in 30% of the sample, the seller made the first approach) and the reasons for acquiring were to a large extent of a political nature and as much emotional as rational. In conclusion, findings of the study emphasise the fact that there is strong evidence of managerial decision-making being irrational and driven by emotions.

3 Multi-Factor Behavioural Model

Based on the above literature review and the different approaches to the behavioural finance factors which influence the decision to invest, a Multi-Factor Behavioural Model has been constructed and used in this study as a tool in empirical research part.

As demonstrated in the Exhibit 3, the Multi-Factor Behavioural Model consists of the following behavioural factors: ‘affect heuristics’, ‘information availability’, ‘confirmation bias’, ‘human factor’, ‘illusion of control’, ‘individual investor’s behavioural model: situation, cognition, personality, emotion’.

4 Data Analysis

To test the expected broad influence of these six behavioural factors, we conducted a number of semi-structured interviews. Due to the complexity of the subject under analysis and the senior management decision-making process, semi-structured interviews were used in order to allow us to ask follow-up questions and to solicit real-world case study examples. The interviewees were all senior managers with extensive decision-making experience in M&A, and the interviews
were conducted under the direction of the M&A Research Centre at Cass Business School in London.

The interviewees were asked to discuss deals and their decision-making process. The interviewers kept in mind the aforementioned biases and heuristics in order to identify their effect upon that process, but these factors were not explicitly discussed nor described to the interviewees. The different factors which were examined in those interviews were as follows:

- **Overconfidence/excessive optimism and affect heuristics:** In order to test the presence of emotional reasoning behind the senior managements’ decisions, respondents were asked to describe how CEOs acted in the M&A deals observed or experienced.

- **Confirmation bias:** Interviewees were requested to elaborate on information challenges during the deal process, agree or disagree with the statement ‘people attach too much importance to information that supports their views relative to information that runs counter to their views’ and provide examples from their direct experience.

- **Illusion of control:** Due to the sensitivity of this factor, only certain respondents (the advisors) were asked direct questions about whether they thought that company senior managers exhibit ‘illusionary control’. Key decision-makers were asked to comment on how much control they have over processes, decision-making, deal selection, etc.

- **Anchoring:** This was discussed within the context of the financial decisions and negotiations during the deal process, and specific questions were asked about how deal valuation was conducted and the pricing of deals agreed.

- **Information availability bias:** Interviewees were asked about the means of gathering information, the hurdles during information gathering and the challenges that information-related problems create.
The results of the interviews provide some interesting commentary on these six factors and how they apply to M&A deals. These comments are, by their nature, anecdotal and cannot be construed to apply to all deals. However, they provide an excellent ‘hands on’ summary of how these factors may impact upon the process and, ultimately, success of some, if not most, M&A deals.

4.1 Overconfidence

Most M&A deals, when publicly announced with great fanfare, declare that they will achieve significant cost and possibly revenue synergies. McKinsey reported in 2005, however, that 70% failed to achieve the stated revenue synergies and 40% failed to achieve the expense synergies. This result is indicative of the overconfidence of senior managers about their ability to achieve savings and other deal goals, and was reflected in some of the interviewees’ comments:

‘These people [doing the deals] would have this ultra high confidence and they would very strongly drive the deal forwards.’

‘I must say we are quite successful and that gives us confidence - which is the most important thing.’

‘[The deal-makers] are by definition super confident people. And it’s natural because as a CEO you are successful and by definition you are an achiever already.’

‘They are indeed very confident and great believers in their businesses and they don’t like to give up, because it is predominantly their own ideas that they tend to unconditionally follow! It’s like a football coach: even if the team loses, the coach keeps believing in it.’
This overconfidence can sometimes be based on prior success and, when so linked, is then properly characterised as ‘hubris’.

4.2 Confirmation bias

The evidence from the interviews strongly supports the theoretical approach of confirmation bias and suggests that it is present as a behavioural factor which influences senior managers making M&A decisions. It is important to note that ‘confirmation bias’ is related to and, at times, determined by, the ‘information availability’ bias discussed further below. Information that is available during the early deal stages forms the initial strong views of senior management which later transform into confirmation bias, wherein contradictory information tends to be rejected.

‘We have a saying about the actual motivations. And it’s called ‘deal horny’. So what happens is you get ready for a deal and everything you see confirms what you want to happen, as if leading towards the deal closure.’

‘… even if the information is … not so useful or even contradictory, the CEO would try and push the deal if he really thinks it is a good deal and believes in the idea.’

‘The team working with the CEO will want to give him information that supports his view. This is only natural. They will avoid telling him things he doesn’t want to hear.’

‘It’s more difficult to prove to the company president that he’s wrong than to find some information – any information – to support what he wants to do.’

Based on the interviews, we observed that in most deals, preconceived views and expectations influence the final decision. Bad news is ignored, as is other information that does not conform
to the initial plan. Good news is given too much weight or used as evidence that the initial plans were correct.

In certain cases, senior managers were described as getting ‘emotionally attached’, which is related to this confirmation bias. It was noted that in most M&A transactions, managers’ overly optimistic belief or pessimistic lack of belief in a certain merger or acquisition influenced acceleration or termination of the transaction, regardless of its underlying features.

‘The CEO and management team would have invested a huge amount of time on a particular deal, so they naturally get emotionally attached to it and they subconsciously want it to be completed.’

Confirmation bias was also present in making a final decision due to time pressure:

‘…it would be extremely disappointing to walk away from the transaction at [a] late stage. So there is a natural effect of ignoring bad news.’

As time is just one of the many resources invested in a deal, other interviewees also noted that the more investment (time, money and other resources) in a deal, the more likely the company would try to identify reasons to continue with it even if there was new conflicting information which showed that it should be terminated.

Similarly, those opposing a deal will rely too heavily on information which supports their position that the deal should be stopped.
4.3 Illusion of control

Evidence suggests that there is a strong presence of an illusion of control in the senior management decision-making process.

‘When they get it wrong, it is because they BELIEVE they can get it from A to B, but they lack knowledge, lack judgement to see that their strategy is flawed.’

‘In any transaction, if the CEO will not want the change to happen, he has got enough control to make it not happen.’

The above statements confirm the strong presence of illusionary control as an innate CEO characteristic. However, other M&A research (Moeller & Brady, 2007) has shown that the success of a deal is ultimately decided after deal closing when the whole organisation must pull together to operate as a combined new firm – and instructions from senior management are not sufficient to make this happen.

Thus it is that during the interviews, respondents such as investment bankers and accountants elaborated on the control element and decision-making processes in large deal-making institutions. The interviewees emphasised the CEO’s role in the decision-making process in large companies, stressing the need in many organisations for collaborative decisions and team work:

‘… with mid- to large cap companies, on sizeable acquisitions, CEOs tend to rely a lot on their teams.’

‘Sometimes it is top down, but sometimes it is [a] bottom up approach. Thus you can’t actually say that it is all in [the] CEO’s hands only.’
‘They [the CEOs] would get involved only in the final decision-making process and negotiations … in a kind of “ironing-out” of certain issues.’

Interestingly enough, the distinction between the large corporates and the entrepreneurial, smaller-cap type of companies was evident throughout all interviews without exception. The aspects of how decision-making varies between large institutions/public companies and smaller unlisted entities are discussed in more detail later.

4.4 Anchoring

Anchoring was evident most often during the valuation and pricing of a deal. This is, of course, a two-way process from both the target and the buyer. It also is very much a negotiation and subject to change if the external markets moved significantly before the deal closed or if there was a material change in either company, either increasing or impairing the attractiveness of the target, or increasing or decreasing the ability of the purchaser to buy the target. However, this was not often seen in practice:

‘For most deals, the price paid varied very little after the two CEOs had early on agreed the price to pay. The rest of the deal team was then used to back into the agreed price to both companies, their shareholders and the analysts.’

‘There could be some price movement if the deal had not yet been made public, but it is a definite ‘loss of face’ to change the price once the deal has been announced except in the most extreme of circumstances.’

‘If the price needs to change too much from the original high-level agreement, then the deal often stops [is terminated] rather than change the money side.’
What typically formed the anchor? In public deals, the starting point is the target company’s stock price.

‘We know we have to make a bid over the company’s stock price. If we can’t get the synergies or other savings at that price, then we won’t bid.’

‘The seller thinks that their highest stock price in the past couple years is a floor selling price. That’s usually an unreasonable expectation, especially in the past several years, but it has been difficult moving sellers from this view.’

‘Even if we do detailed calculations, it always comes back to what the stock price is NOW.’

4.5 Information availability bias

The limits on information availability appear greater during the early stages of a deal when the process has just started and few managers or advisors are engaged in the process, often because of confidentiality concerns. Thus, for this factor, we have split the early ‘strategy’ phase into three different sub-phases consisting of 1) deal search, 2) deal selection and 3) deal finalisation.

**Deal search**

Personal contacts were often mentioned as being significant at the deal search stage when perhaps many possible acquisition candidates were still being considered. Some deal-makers research the market themselves and, in these cases, personal networks and contacts were described as factors influencing the progression of information gathering. It is, of course, likely that such networks have similar information merely because they are operating in the same network, which can relate to the ‘confirmation bias’ factor discussed earlier.
Other sellers proactively approach potential buyers. This should certainly be the easiest situation in which to obtain information about the target company as, in such a deal, the target is a willing seller and can also usually be trusted to give access to confidential information, although it may not volunteer negative information which might adversely influence the price or likelihood of deal success.

The third way to obtain information is through professional intermediaries such as accountancy firms, investors such as private equity firms, specialised consultants, banks and investment banks. In our interviews, we found that many companies consider these expert advisors to be impartial and thus a preferred route, albeit at a cost.

‘Most of the times we get information about deals from advisors like [accountancies] or investment bankers.’

‘We have long-term relationships with some intermediaries - brokers who introduce us to a certain number of deals that we review.’

Third party advisors were also described in cross-border deals as playing the important role of ‘handholding’ companies whilst providing them with knowledge of a local region, regulations, business practices and other issues that otherwise might be foreign to the buyer. This was seen as critical when new markets were entered into where the acquiring company understood that it did not have internal knowledge of that market.

‘…entering into the market ‘cold’ as it were, without having any connections or local presence is very difficult. Thus it is much easier if you can get some local insights … just knowledge of how it works locally.’
Generally, during the deal sourcing stage, managers claimed that information is generally easily accessible and allows them to form an initial opinion about the deal. But perhaps this impression of the easy availability of data precludes a deeper search for information that might not be noticeable on the surface. Other studies (May et al., 2002) found difficulties in the whole due diligence process in M&A deals, which highlights the importance of this behavioural factor on deal success.

**Deal selection**

Embedded within the theory about information availability is the concept of ‘home bias’, which is a tendency to make two mistakes: trust the easily accessible information about your home market that you know well and, conversely, distrust non-home market information that does not conform to your experience. This can result in inappropriate shortcuts being made when doing deals in the home market (and more reliance on ‘gut’, as discussed later).

‘There is a big factor of knowing the market and having a certain network too.’

‘We have looked at deals in South America, China, India and Australia, but the team that is based here is mainly focusing on [the home] region. We simply have our expertise here and try to focus on what we think we know best.’ [said by a European company]

‘We can act more quickly in a domestic deal because we don’t have to do as much due diligence.’

Interestingly, when moving away from the home market, more time is spent gathering information as there is less reliance on in-house expertise and managerial instinct about those foreign markets, thus there is also greater use of external experts and advisors.
Final decision-making

The senior managers whom we interviewed claimed that the final decision-making process is rarely influenced by information scarcity or home bias because the importance of the final decision and the process which leads to it makes this crucial period more rational and data dependent. Senior managers felt that unbiased information would ultimately be available prior to the final decision:

‘The information is fairly easily accessible and those that really want the deal to succeed usually find ways of getting the information.’

‘Look, it’s not so much about the actual information, because you can get most of the diligence done. There are data rooms and you can get advisors on board to increase the good result outcome.’

‘If there is very little information about the deal, it would naturally create nervousness. But generally I would say they always find ways to overcome the hurdles. It’s not a huge issue most of the time.’

Others, typically further down in the organisation, outlined the challenge of information accessibility as one of the most important elements in the decision-making process. This was especially true when the deal was cross-border or in another developing country:

‘The information access is a big challenge for any deal, especially in the Eastern European region.’ [said by a Western European company head]

‘Because it was in Kazakhstan and it was a fairly small business where they don’t really have consolidated information and a procedure in place we could have used, we had to go
out there and hold them by the hand in order to get through the due diligence process.’

[noted by a company currently not operating in Kazakhstan]

‘It’s that kind of slightly “intangible factor”, kind of “unknown risks” really. Kind of
“what don’t you know about how things get done in a certain geography”. That becomes a
real challenge.’

Moreover, some of the experts we interviewed noted the importance of information accessibility
during hostile M&A transactions where the target company is trying to resist the takeover
attempt:

‘When you get that type of emotion [hostility] in any acquisition, then people from the
target companies start putting up barriers.’

‘Of course, when you start talking about hostile acquisitions, it is a totally different ball
game.’

Nevertheless, these hostile deals still do proceed even without full information, usually due to the
application of similar data either from the target company itself or general knowledge of what is
publicly available.

4.6 Affect heuristics

Intuition, gut and instinct were all mentioned as important factors in making decisions about
whether to acquire a company and, moreover, throughout the remaining deal process. CEOs get
to where they are at the top of a company because they have made the right decisions in the past.
They expect that this will continue when they consider an acquisition or merger, and they apply
their prior experience to the deal situation.
Respondents who were key investment decision-makers themselves stated that some decisions are driven by a ‘gut feeling’, others give a satisfactory ‘buzzy feeling’ and that the negotiation process excites as if ‘playing a game’. But these are also the same managers who are likely to trust (over-trust?) their own experience of the market in making the occasional M&A recommendation.

In addition, the following comments were made illustrating this behavioural factor in M&A deals where ‘gut’ and ‘playing the game’ are influencers:

‘The deal will never be finalised based only on “hard information” or on numbers. Never. Only when the managers meet and say, “OK, is this a good deal for you and for me, we like each other, we trust each other…”, then the deal gets done.’

‘We all want to prove we are bigger and better.’

‘We call it the “larger yacht syndrome”. When you sail to St Tropez and see that there is someone moored next to you with a bigger yacht, then you want to beat him. You always want to win that race. So you go out into the market and acquire another company. Now you’re big!’

‘You know Darwin’s theory of natural selection? That the strongest only survive?’

‘People simply feel the need to make an acquisition. And I [as CEO] have felt the need in the past to make an acquisition. You grow the company organically and when a certain time comes, you feel “right, now I am going to start buying companies”.’
In Moeller & Brady (2007), there is a description of what they call a ‘run-away deal’ - one where the deal is difficult to stop once the acquisition or merger process has progressed beyond a certain point (especially after it has been made public):

‘There is a risk that people get “deal fever” as it were. Related again to the risks … that people get carried away with the transaction.’

‘Up to that stage [of price agreement] you get a buzzy feeling. Up until agreement, it is fun, just before you agree the price. Once you have agreed the price, it’s gone.’

5 Multi-Factor Model Extension: additional factors

During the interviews, additional factors were observed which influence senior management’s behaviour whilst making M&A-related decisions.

Risk-return aversion appears to affect the behaviour of CEOs that manage large corporations. CEOs were noted to be wary of sometimes small, though resolvable, elements of risk (minor tax issues or market regulations) versus a high upside potential. Sensitivity to public data releases and potential ‘leakage’ is believed to have negative effect on share prices. Thus public companies’ CEOs were described as being more careful whilst making investment decisions due to their risk aversion.

Interestingly, according academic theory, the risk-return element is one of the fundamental building blocks of the Nobel prize awarded to Kahneman and Tversky’s ‘Prospect Theory’, which is considered to be a framing effect.

Personal legacy is another new behavioural factor which was mentioned as strongly influencing the final decision-making of senior managers. Each CEO, entrepreneur or president of a
company was noted by respondents to accelerate or terminate a certain transaction primarily based on how much benefit that particular transaction would bring to their personal welfare: an existing job title, remuneration, area of control or recognition.

A number of situations were described during the interviews where the CEO felt the urgency to do a deal because of his or her need to put their mark on the organisation within the relatively short time that they would be in charge of the company. A study conducted in 2009 at the M&A Research Centre at Cass Business School (What Should I Do Next? CEO Succession, M&A Deals and Company Performance) found that the average tenure of a CEO in Europe is only 4.4 years.

‘Every CEO is excited about a certain deal depending on how he sees his own future in the company. Whether his personal status and financial welfare would gain or lose traction in such an affair…”

‘Another subtle part of any deal is that any CEO while reviewing our proposition would firstly think, “Is this a beneficial transaction for me?”’

Both factors were outlined by respondents as strongly determining the final decision-making process of senior managers.

6 Multi-Factor Behavioural Model: extension

The Multi-Factor Behavioural Model has been re-shaped as a consequence of data analysis. Exhibit 4 presents the interaction of biases and shows how the human factor, affect heuristics and Greenspan’s individual investor’s model dominate the remainder of the factors, having a very strong influence on senior management’s decision-making processes.
7 Conclusions

Based on the analysis of behavioural finance theories and research, a Multi-Factor Behavioural Model was constructed. The model comprises of the following factors: ‘information availability’, ‘confirmation bias’, ‘human factor’, ‘individual investor’s behavioural model’, ‘illusion of control’ and ‘affect heuristics’.

Having applied the ‘individual investor’s behavioural model’, it was found that an element of ‘cognition’, usually formed of knowledge and the right judgement, tends to be an important part of the decision-making process in M&A. However, some extremely knowledgeable entrepreneurs, being experts in their niche market, were found to make irrational decisions or potentially act ‘gullibly’. In addition, ‘situational’ factors, mainly created by competitor companies’ actions tend to evoke management’s desire to outperform the competition, described as the ‘larger yacht syndrome’.

A set of ‘affect heuristics’ factors based on emotions such as ‘gut feeling’, excitement or a ‘buzzy feeling’ are sometimes a motivation to go ahead with the ‘game’. However, such features were often seen to be the privilege of smaller companies’ managers and entrepreneurs rather than those of large corporations.

Additionally, ‘personality’ was observed to be a two-dimensional factor strongly influencing the success of a transaction. Firstly, managers of a buyer companies tend to be compared to the ‘big energy’ and ‘hard work ethic’ of football coaches, who tend to lead the team during uncertainty and down times. Secondly, managers of target companies need to be able to sell not just the business itself, but also the people. They usually tend to deal with the pressure of being judged, needing to fit in with ‘psychological profiling’ and being interactive and highly competent. The
incompetence of target companies’ management was observed to receive the blame for unsuccessful M&A transactions.

New observations, deriving from the empirical part of the study, have contributed to the existing Multifactor Behavioural Model by extending it with two new elements: the ‘risk-return profile’ and ‘personal legacy’.

Interestingly, in this study, the risk-return element is one of the fundamental building blocks of Kahneman and Tversky’s ‘Prospect Theory’, which in behavioural finance is considered to be a framing effect. Even though framing effects were beyond this study’s researchable objectives, such findings outline that the risk-return profile is an important factor which influences the more considerate and less irrational investment decisions often observed to be a feature of the managers of large corporations. However, prior to taking into account the assessment of the risk-return profile of an investment, senior managers tend to assess the ‘personal legacy’ of the deal. This was observed to determine the initiation of the decision to make an M&A transaction.

And last but not least was the important observation which came from the most conservative respondent. Having been asked about their personal perception of their own very senior management role in M&A, the respondent confidently responded, ‘I love it. It’s all about people!’ Such a statement proves that no matter how rationally decisions are supposed to be made in M&A, and despite all of the calculations that are made, ultimately these deals are indeed finalised by a human being, who is naturally prone to decisions affected by emotion and the hint of ‘personal legacy’, and determined by their personality.
References


Working paper


### Exhibit 1: Summary of major behavioural factor dimensions

<table>
<thead>
<tr>
<th>Psychological phenomenon</th>
<th>Definition summary</th>
<th>Phases of M&amp;A deal in which principally observed</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overconfidence / Excessive optimism</td>
<td>People make mistakes more frequently than they believe and view themselves as better than average, also overestimating how frequently they will experience favourable outcomes.</td>
<td>Design Integration</td>
<td>Ignoring data which shows that most M&amp;A deals do not deliver the projected results and that they usually fail.</td>
</tr>
<tr>
<td>Confirmation bias</td>
<td>People attach too much importance to information that supports their views relative to that which runs counter to their views.</td>
<td>Pricing</td>
<td>Relying on the advice of people and advisors who work directly for the CEO or deal team.</td>
</tr>
<tr>
<td>Illusion of control</td>
<td>People overestimate the extent to which they can control events.</td>
<td>Integration</td>
<td>Ignoring external factors that can have an impact on integration plans.</td>
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<tr>
<td>Anchoring</td>
<td>The tendency to rely on an initial or presented figure and making inadequate subsequent adjustments when new information becomes available.</td>
<td>Pricing</td>
<td>Using current market capitalisation as the starting point for valuation and negotiations.</td>
</tr>
<tr>
<td>Information availability bias</td>
<td>People rely too much on information that is readily available and intuitive, rather than that which is less salient and more abstract, thereby biasing judgement.</td>
<td>Pricing</td>
<td>Ignoring information found during the due diligence process if it doesn’t support the deal strategy and pricing.</td>
</tr>
</tbody>
</table>
Exhibit 2: Behavioural factors

<table>
<thead>
<tr>
<th>Affect heuristic</th>
<th>Basing decisions primarily on intuition, instinct and gut feeling.</th>
<th>Design Pricing Integration</th>
<th>Rapidly deciding to proceed with a deal prior to full due diligence, planning and analysis.</th>
</tr>
</thead>
</table>

**Deal Design**
- Excessive optimism, including personal legacy ('hubris')
- Overconfidence
- Affect heuristic ('gut and instinct')

**Deal Pricing**
- Anchoring
- Information availability bias
- Confirmation bias
- Affect heuristic ('gut and instinct')

**Deal Integration**
- Illusion of control
- Overconfidence
- Excessive optimism
Exhibit 3: Multi-Factor Behavioural Model
Exhibit 4: Final Multi-Factor Behavioural Model