

A SENSEMAKING PERSPECTIVE OF FINANCIAL RISK TOLERANCES

(Work-in-progress)

INTRODUCTION

Financial risk tolerances are frequently considered a complex, elastic and diverse psychological trait, providing a cognitive stereotype which at the individual layer, guides individual investment behaviours and decisions, and collectively, influences systemic risk acceptance, perception and regulatory policies (Grable 2008; Grable 2013). Defined as the “*willingness to engage in behaviours in which the outcome remains uncertain with the possibility of an identifiable negative outcome*”, financial risk tolerances are often influenced by many motivating factors including personal psychological biases, collective heuristics and contextual and environment cues which affect financial risk perceptions, assessments, attitudes and investment behaviours ((Irwin 1993 p.11; Daniel, Hirshleifer & Teoh 2002; Grable, Lytton & O'Neill 2004 p.142). There is however limited research on how these motivating factors influence individual and collective financial risk tolerance levels (Hirshleifer 2001; Grable, Lytton & O'Neill 2004). We therefore utilise Weick's (1995) sensemaking process frameworks, to deepen understandings on the impact of investors financial risk biases and heuristics influencing risk tolerances within the financial ecosystem.

Sensemaking provides a framework to consider the fundamental social processes, beliefs and activities investors use to make plausible sense of complexity (Weick, Sutcliffe & Obstfeld 2005). We explore the ongoing retrospective development of risk perception and assessment through underlying social processes considering the role of ongoing, interactive relationships in developing commonly shared risk tolerance, retrospective historical impacts, and the importance of local and expert knowledge, enacting with the environment, gaining feedback, interpreting, and adapting risk tolerance perceptions to local context. Using perceptions of actors central to more speculative IPO capital raising within a posited higher financial risk-tolerance environment indicatively identified within Western Australia ('WA'), this study will explore ongoing activities undertaken between actors at the interconnected micro, meso and macro environmental layers.

In focusing this study on financial risk tolerances within the context of capital raising, we contribute to limited sensemaking literature, considering the monetary dimension, as a related but separate, parallel activity resource layer with its own unique characteristics and often subject to different social, and regulatory processes than other resources within business activities (Håkansson & Olsen 2015) .

USE OF THEORY (Behavioural Finance and Sensemaking)

Behavioural Finance

Within financial markets, departures from rational investment behaviours are frequently found to be systematic and predictable errors, with investors repeatedly prone to allowing psychological bias, heuristics or various rules of thumb influence investment decisions (Baker & Nofsinger 2002). Termed '*heuristic simplification*', investors may rely upon a catalogue of psychological biases to reduce complexity of information, with often predictable mistakes (Baker & Nofsinger 2002 p.100).

The emergence of the behavioural finance field in the 80's therefore grew as a reaction to neo-classical finance's inability to address non-rational behaviours of actors within efficient financial market models (Barberis & Thaler 2003). It emerged to provide a psychologically based, structured framework to assist explanations of underlying human factors impacting financial

decision making, by integrating insights from psychology, impacts of investors biases and predictable judgements on investors financial decisions, judgement heuristics, wider systemic errors, and relaxation of investor rationality assumptions (De Bondt et al. 2008; Shefrin 2009). We posit investors financial risk tolerance attitudes are influenced by these bias's, environmental and contextual cues. Now poised to become the dominate finance paradigm (De Bondt et al. 2008), we therefore adopt behavioural finance presumptions of financial risk tolerances being a tractable and multidimensional concept, influenced by many predisposing factors (Grable, Lytton & O'Neill 2004) and contribute to limited literature on the applicability of these bias's and unconscious priming mechanisms and their impact on investors risk tolerance perception and attitudes.

Sensemaking

Our focus on motivating factors influencing financial risk tolerances, finds sensemaking an important theoretical concept to explore essentially social processes influencing individuals' familiar repertoire of underlying biases, heuristics, judgements or understandings (Weick 1995; Weick, Sutcliffe & Obstfeld 2005). Weick (1995) developed the sensemaking framework describing how when faced with an perceived unexpected outcome, sensemaking processes are invoked to pull understanding from previous cognitive frameworks and used to provide a form of cognitive stereotype, ultimately guiding decision making processes (Weick, Sutcliffe & Obstfeld 2005).

Sensemaking recognises the prior influence of multifaceted individual and societal influences and interactions, and so when faced with unexpected complexity, individual will scan their environment, gain feedback, and interpret those cues to guide functional understandings, simplify reasoning processes, reduce complexity, and create a plausible understanding of their environment (Maitlis & Christianson 2014; Maitlis 2005; Weick, Sutcliffe & Obstfeld 2005). When individuals interact with each other, drawing upon a familiar repertoire of heuristics and bias's, each interaction will influence ongoing adaption and interpretation of common heuristic beliefs and biases, as part of the social construction process (Medlin & Törnroos 2014).

Within the context of financial risk tolerances, we posit each interaction influences investors perceived financial risk perception and assessment at the individual layer, and when collectively communicated and shared, develops into consensual interpretation, becoming embedded within associated groups as an expected course of action or inter-cognitive understanding (Stigliani & Ravasi 2012). Individuals' collective interpretation and communal meaning then influences demand, management and implementation of commonly accepted organisational risk management and regulatory policy setting, at the collective or environmental layer (Gilovich, Griffin & Kahneman 2002; Gowda 1999).

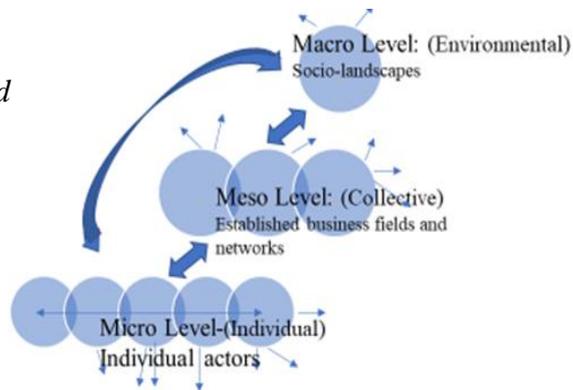
We therefore utilise the three-layer Business Fields' framework (figure 1), to delve more deeply into individuals collective interactions within the financial ecosystem, at the micro, meso and macro layers (Möller 2010; Geels 2002). Within the multi-layer framework, the "micro" (individual, yet interconnected actors), "meso" (organisational, business networks) and "macro" (environmental, political, regulatory) layers are assumed to iteratively interact, as a seamless web, dynamically adjusting to actors relationship activities within and between each network layer (Möller 2010 p.363)

Micro Level: At the individual layer, biases provide a form of priming stimulation or nonconscious associational cues guiding behavioural preferences, and so, at the individual level, common beliefs

and biases guide individual interpretation and assessment of financial risk (Berger & Fitzsimons 2008; Chartrand & Bargh 1996).

Meso Level: Collective sensemaking occurs within the meso, business network layer when an individual thought is shared and develops into consensual interpretation, inter-cognitive representations, or embedded in collective groups as shared understandings for an expected course of action (Stigliani & Ravasi 2012; Maitlis & Christianson 2014; Mouzas & Henneberg 2015).

Figure 1: Business Fields as a Layered System (modified from Geels 2002, Moller 2010)



Arrow indicate interactions and movement directions between all levels

Organisational members will communicate and may advocate amongst each other to jointly engage, persuade or influence others to think similarly, and when collectively accepted, shapes embedded business practices, adapting network structures (Medlin & Törnroos 2014; Maitlis & Christianson 2014). Social and cognitive proximity support the coordination and transmission of shared knowledge, as organisational members engage with each other to promote strategic change, assist communal meaning and social construction and try to persuade others to their viewpoints, often incorporating local context practices into networking activities and processes (Peters, Pressey & Johnston 2016; Maitlis & Christianson 2014; Schwandt 2005). Within this organisational layer, collective risk tolerance cognitive processes influence demand, management and implantation of organisational risk management and policy processes (Gilovich, Griffin & Kahneman 2002; Gowda 1999). An organisational identity emerges from the collectively assumed references, processes or enduring distinctive features, by which members are able to define their organisation (Gioia & Thomas 1996; Clark & Geppert 2010).

Macro Level: Beyond the organisational layer, we propose that environmental sensemaking occurs when attention is paid to public events, systems processes or policies that that lead to new institutional or environmental logic (Nigam & Ocasio 2010). Financial regulatory systems guide much institutional logic as by their very nature, they are designed to influence financial risk management systems and establish processes and structures creating collective organisational order, providing a form of hegemony authority (Sinclair 2000; Brammertz & Clacher 2010).

However, regulatory policies will vary in legitimacy over different time periods, and between each different local society, and so development of regulatory policies often strongly represents local interests, in that particular society, influenced by local context, practices, social interaction and interpreted word views (Sinclair 2000; Cox & Sinclair 1996). Interpretation of regulatory policies and process norms are often linked with individuals, associated with “*coordination service firms*” (CSF) such as law offices, financial advisors, technical advisors etc, who supplement expert knowledge with common practices of local environments (Sinclair 2000 p. 488, 490). Advice is often sought from CSF’s to supplement risk perception or support the ability of early stage, high risk capital suppliers to provide funding through the use of complicated contractual documentation or interpretation of accounting practices, all of which are subject to local heuristics and regulatory biases (Antonczyk & Salzmann 2012). Systemic regulatory processes therefore provide an overarching priming of heuristics and biases yet remain influenced by local knowledge and judgement which determines overarching macro layer financial behaviours and risk tolerance

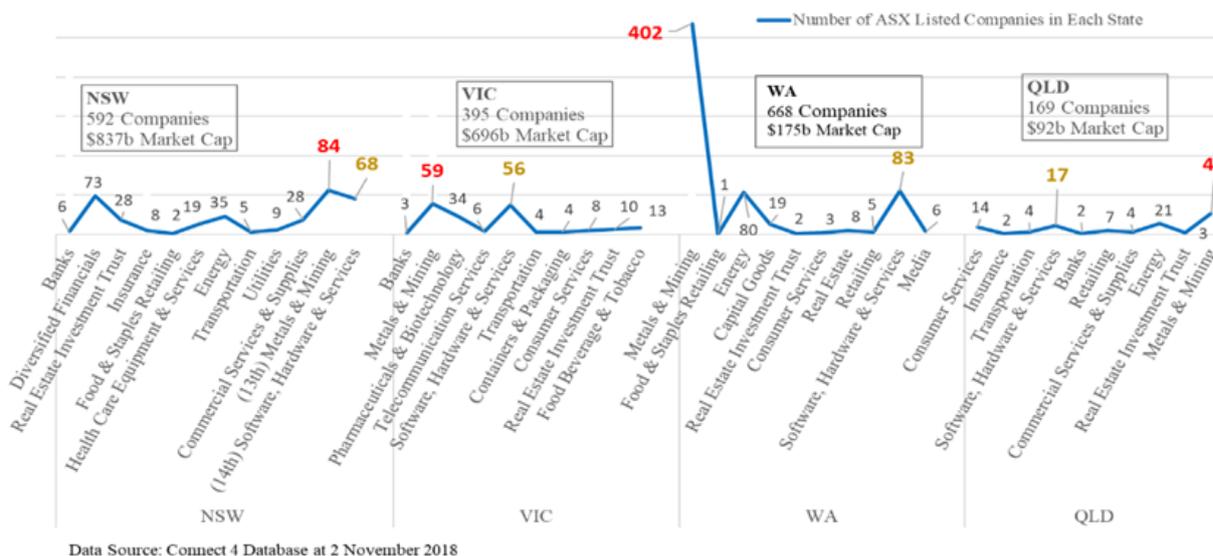
appetite levels. Policy makers must therefore choose to manage risk within local public demand, and so policy establishment remains influenced by local collective biases and heretics, and ultimately interpretation of that policy guiding local context financial judgments, behaviours and processes (Gowda 1999; Nigam & Ocasio 2010).

Our study will therefore synthesis sensemaking frameworks with behavioural finance risk tolerance literature to address our research question of how can sensemaking processes assist understanding of the fundamentally social processes influencing individual and collective groups’ motivating biases and heuristics, within the multi micro, meso and macro layers, which ultimately impact financial risk tolerance attitude levels within a financial ecosystem.

DESCRIPTION OF STUDY AND METHODOLOGY

A review of IPO capital raisings in Australia between 2011 and 2017, highlighted a concentration of metals and mining industry sector (‘mining’) companies. The mining industry sector which is dominated predominately by junior exploratory mining companies, comprises the largest number of ASX listed companies in the Australian economy, with over 700 firms, operating projects across 100 countries (*Key Industries in Australia* 2018). A concentrated majority of these mining companies choose to headquarter in Western Australia (‘WA’), primarily to raise capital during high risk early stage of their operations and often without any operations in Australia or established revenue sources. This has resulted in the WA’s economy being strongly dominated by mining (figure 2).

Figure 2: Top 10 ASX Industry Sectors in NSW, WA and Qld (ranked by Market Capitalisation)



Given the concentration of higher risk capital raisings undertaken in WA, it is therefore posited that WA ‘s business environment indicatively supports speculatively risky capital raisings signalling a indicatively higher risk tolerance propensity. WA’s capital raising sector therefore became the focus of our data collection for this exploratory study.

Data Collection and Methodology

Guided by Ferrary and Granovetter’s (2009) work identifying network groups central to access of finance in early stage, higher risk firms within Silicon Valley, we identified a diverse group of WA based advisors, company directors and brokers who interacted with, provided guidance to and

were considered strategic to the dynamics or '*robustness*' of the capital raising financial environment within WA (Ferrary & Granovetter 2009 p.329). To explore emerging theory, we adopted a qualitative, elite interview methodology incorporating semi-structured, open ended questions to capture perceptions, biases, beliefs and retrospective and social interactions at the individual, collective and environmental layers (Mandják, Simon & Szalkai 2011; Eisenhardt 1989).

Interviewees were undertaken with a diverse group of elite or expert WA based advisors, directors, brokers identified as able to provide a nuanced understanding of WA's early stage IPO capital raising sector. Eleven interviewees were asked their perceptions around two main topics. The first topic considered how capital raising was undertaken within their industry or investor group. This was useful to explore risk tolerances, local norms and biases impacting risk tolerances, influence of CSF's or regulatory influences on capital raising activities, present and historical behaviours of actors within WA business networks. The second topic explored who they might approach when seeking information and knowledge associated with potential capital raisings, which provided further insights into relationship interactions, locational preferences, perceived capabilities of actors and their associated CSF's.

After transcription, common themes were coded using nVivo, identified upon replication, and aligned to sensemaking constructions, to explore cognitive evolution of risk tolerances at each of the three business layers.

Theoretical Implications

The synthesising of behavioural finance risk tolerances and sensemaking processes provides contributions to both theoretical fields. The exploratory nature of this paper and relatively small data collection, demonstrates the application of sensemaking processes to the parallel monetary activity layers, indicating the influence of social interaction and sensemaking processes on interpreting and iteratively adapting financial risk tolerance biases within the three business fields layer framework. By exploring an indicatively high financial risk tolerance concentration within Australia common regulatory framework, we demonstrate the influence similarity of collective thought processes and important incorporation of local context in shaping and adapting both individual risk tolerance levels, and those collectively assumed within a wider business grouping.

Explanations of variability in risk tolerance perceptions specifically arising from retrospective influences of WA's historical settlement and prospector origins, and the impact of ongoing connections, interactions and relationships embedding knowledge are acknowledged as having some influence in priming financial decision-making biases. We further find individual risk tolerance perceptions appear closely aligned to retrospective influences, impacting individual and collective beliefs and biases, which continue to be reinforced by ongoing relationship interactions, both socially and through embedded knowledge networks, creating legitimacy through shared understandings (Welch & Wilkinson 2002; Batt & Purchase 2004).

By focusing on the speculative capital raising sector, this paper further contributes to limited network research into activities within monetary dimensions, incorporating insights across all layers of the local financial ecosystem, demonstrating how each interaction, shapes or supporting other within and between the multi-layer financial ecosystem.

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