

The Role of Unions in Addressing Behavioural Market Failures

Abstract

The traditional view of economists is that unions cause market failures, thereby reducing economic efficiency. Freeman and Medoff challenged this overly negative view, suggesting unions address market failures associated with the 'public goods' aspects of terms and conditions in the workplace for members and non-members alike. This paper builds upon their work by arguing workers' collective voice via unions can also be used to address particular behavioural market failures associated with common defects in individual cognition. Specifically, this paper suggests how unions through membership, expert and organisational learning effects can help address four common behavioural market failures or cognitive mistakes, namely, short-termism, inattention to important but hidden attributes, unrealistic optimism, and poor probability estimation. In order to explore how the three effects help mitigate the four failures, the paper draws upon insights from behavioural economics. **Finally, the paper discusses the factors which influence the extent of the application of the three effects.**

Keywords: unions, behavioural market failure, union membership behaviour, union effects

Introduction

Traditionally, economists regard unions, as monopoly sellers of labour, as causing market failures, thereby, reducing economic efficiency (Kaufman 2004). Freeman and Medoff (1979, 1984) challenged this, suggesting unions also had a collective voice dimension, which they could - and did - use to address market failures associated with the 'public goods' (or non-exclusive) aspects of terms

and conditions of employment for members and non-members alike. This paper builds upon Freeman and Medoff 's work by arguing workers' collective voice via unions can also be used to address particular behavioural market failures (BMFs), namely those identified by Bar-Gill (2012) and Sunstein (2014) and which are associated with common defects in individual cognition. Specifically, this paper suggests unions draw upon the knowledge of their members ('membership effect') as well as that of their officials ('expert effect') and the collective experience of their organisation ('organisational learning effect') to address four common BMFs or cognitive mistakes. The first entails focusing on the short-term aspects of the employment situation, without duly considering future events and issues. A good example would be a focus on short-term wages rather than long-term benefits in the contract negotiations. The second involves inattention to important employment issues whose complexity renders them virtually invisible, or non-salient, to the individual worker. A good example would be the employer's hazard identification system or job evaluation framework. The third occurs because the individual worker is unrealistically optimistic about the future course of the employment relationship, and, thus, under-prepares for the possibility of negative outcomes or events. Dismissal for unsatisfactory performance is a good example. The fourth arises from the individual worker's poor understanding of probability and consequent failure to address future events with a high likelihood or even virtual certainty. A sufficiently funded pension to finance retirement would be a good example. All four BMFs produce suboptimal outcomes, especially for workers, in individualised employment contracting situations. All four failures can be substantially mitigated through union representation. Here, unions are better at accounting for the long-term in making their bargaining demands and dealing with management, partly because the long-term for many of their members is the short-term, the current lived reality, for other members. Most aspects of the employment relationship are salient to unions, because, at any given time, a large and diverse spectrum of members has a range of issues and problems. Unions have less reason to be unrealistically optimistic: the hard lessons of working life are inescapably evident in the numerous experiences of its members. A union's access to data from its members also

gives it a better sense of base-line probabilities for future events and issues and, thus, less need to rely on crude heuristics to determine what might happen and when. As such, a union is well-placed to address the sources of market failure that lead to suboptimal labour market functioning.

In building upon Freeman and Medoff, this paper draws upon a body of literature from behavioural economics that is seldom considered within mainstream studies of unions and industrial relations (pace Kaufman 1999), whose main disciplinary traditions are drawn from, *inter alia*, economic sociology, labour law and history and politics (see, for example, Ackers and Wilkinson 2003). Consequently, this paper seeks to bring to the attention of labour and related scholars a new perspective for examining the socio-psychological processes by which unions carry out their functions and what resources they draw upon to do so. Behavioural economics provides labour scholars with a more comprehensive, insightful and empirically validated theoretical framework for understanding how individuals behave as members of a collective body like a union (in contrast to piecemeal, partial theories from psychology, the highly unrealistic, but comprehensive, ultra-rational theory of neo-classical economics, and rather under-theorised approaches from industrial relations and early institutional labour economics). Thus, we believe behavioural economics provides a means of systematically discussing, understanding and categorising what might already be known of but only in *ad hoc* practical ways or through partial or superficial theorisation. In doing so, behavioural economics helps with producing coherence and totality, facilitating a way of integrating earlier insights about unions into broader discussion of 'what unions do' and 'how they do it', with strong implications for union-related policies. Beginning by laying out traditional neoclassical definitions of market failure, the paper then moves to define BMFs. From there, it outlines the three union effects and discusses their potency in addressing the four failures. It concludes by acknowledging the need to test these insights through fieldwork.

Market failure defined

The concept of market failure originated in neo-classical economics to explain situations where the rational pursuit of self-interest by individuals does not produce efficient allocations of goods and services (Bator 1958). Market failures typically arise from one of three sources: the nature of the market, the nature of the good or service exchanged, and the nature of the exchange itself (Krugman and Wells 2006). The first market failure occurs when the buyer or seller has the power to influence prices and/ or quantities to its own advantage, as with a monopoly/monopsony or oligopoly/oligopsony. Thus, in standard neoclassical analysis, a seller with some market power maximises profit by restricting the sale of the good or service to raise its price. Furthermore, in the absence of competitive pressure, monopolists and oligopolists have the discretion to adopt sub-optimal production practices that raise costs and lower productivity - what Leibenstein (1966) originally termed 'x-inefficiency'.

The second market failure occurs with so-called 'public goods' or externalities in the production or consumption of a good. Public goods (or services) are non-exclusive, in the sense that purchasers and non-purchasers alike can enjoy the benefits of the good (Stiglitz 1989). Since buyers can rationally decide to free-ride on the purchases of others, public goods are under-produced and consumed in a private market relative to optimum levels. Police services are a classic example of a public good. An externality transpires when a third party gains or loses from the production or consumption of a good (Laffont 2008). Yet, the buyer and seller consider only their own private costs and benefits in their price and quantity decisions. Thus, negative externalities entail over-production and consumption at sub-optimal prices that fail to account for third party costs, the iconic example being the manufacturing plant that produces air pollution. Positive externalities involve the opposite: under-production and under-consumption and higher than optimal prices in a private market that fails to account for third party benefits, as, for example, with vaccinations.

The third market failure originates with imperfections in the exchange process, where buyers and sellers have bounded rationality and contracts are incomplete (Krugman and Wells, 2006). With bounded rationality, the two parties typically have imperfect, or limited, information about the other party's motives and performance. As a result, finding, establishing, and enforcing a contract can involve substantial transaction costs. Furthermore, the difficulties and thus costs of devising contracts to cover all the outcomes and conditions of a complex relationship can make incomplete contracting inevitable for all but the simplest of transactions. Information asymmetries can expose the parties to a serious risk of contract renegeing, prompting them to choose sub-optimal contract arrangements for their low transaction costs rather than potential efficiency gains. In the presence of agency issues, managers again have some discretion to adopt inefficient production practices that raise costs and lower productivity, akin to Leibenstein's (1966) concept of 'x-inefficiency' .

Behavioural market failures

Bar-Gill (2012) has devised a new class of market failures, coined BMFs, which focus on humans' limited mental capacity to make decisions in their own interest. In the past, bounded rationality usually referred to the limits of people's knowledge and understanding of *other* people's wants, needs, and intentions, as with information asymmetries in principal-agent relationships. The implicit assumption is that individuals have a complete understanding, and perfect information, about what is best for themselves. However, research in behavioural economics reveals that individuals have serious cognitive limitations in making good decisions to further their own welfare (Kahneman 2011).

Humans have two modes of cognitive operation located in different parts of the brain, what Kahneman (2011) refers to as systems 1 and 2. BMFs stem from the heavy, everyday reliance on the system 1 mind (Sunstein 2014). The system 1 mind is fast, intuitive, and habitual, and applies heuristics, or mental short-cuts, to simplify complex judgments. The system 2 mind is intentional,

methodical, and reflective, but slow and effortful. If humans were truly rational actors in the conventional sense, we would rely primarily on the system 2 mind to make decisions in uncertain situations. In fact, both laboratory experiments (Charness and Rabin 2002; Fehr and Goette 2007; Loewenstein and Lerner 2003) and field studies (Ariely and Wertenbroch 2002; Ashraf Karlan, and Yin 2006; DellaVigna and Malmendier 2006; Thaler and Benartzi 2004) show that we depend on our system 1 minds a lot more often than system 2 minds.

The system 1 mind can make many decisions in rapid succession, ideal in ancestral flight-or-fight situations, while using little mental energy (Sunstein 2014). However, system 1 is prone to certain misjudgements that lead to sub-optimal decisions. Sunstein (2014:34-50) classifies these into four types of BMFs or mistakes: namely, considering mainly short-term costs and consequences in decisions, almost entirely to the exclusion of longer term ones; inattention to the less salient, and especially more complex, aspects of any given situation, even when important to decisions; unrealistic optimism in assessing one's own capacities, opportunities, and challenges, prompting us to take too many risks and too few precautions; and errors individuals regularly make in under- or over-estimating probabilities of future events.

Both individual workers and individual managers have a common proclivity for BMFs. However, BMFs are much more of a problem for workers, in advancing and defending their interests, than they are for managers for two reasons. First, managers are formally organised into a collective, the management hierarchy, and advised by their own specialist experts. Unless unionised, workers are not. As later sections make clear, formal, collective organisation provides both informational and cognitive advantages that help to address BMFs. Second, and probably more importantly, managers have a *right to manage*, what is commonly termed managerial prerogative, as the default rule in all employment contracts. Managers thus have the authority to unilaterally set all terms and conditions not included in the employee's contract. In practice, this means that there is little pressure to 'get it

right' in the initial contract discussions or negotiations between individual employer and employee prior to the commencement of employment. Why is this? Managers may invoke their prerogative to make decisions at any time, as new information or understandings arise. Managerial prerogative allows managers to re-visit and correct their cognitive errors (Harcourt *et al.* 2015).

Old view: unions create market failure

In the 'old' view, exemplified by Reynolds (1981), a union is a monopoly seller of labour that prevents competition among a group of workers by acting as their sole bargaining agent (Kaufman, 2004). Like any monopolist, the union faces a downward sloping labour demand curve, and so it maximises wage revenues by raising the wage rate above its market clearing level to a point where marginal labour cost equals marginal revenue product (Kaufman, 2004:353). The quantity of union labour potentially supplied rises as the appeal of working in the unionised sector increases. The quantity of union labour demanded falls as union members become more expensive, leading to an overall contraction in unionized employment. Two scenarios are envisioned for this excess of labour supply over demand (Kaufman 2004). First, some workers remain unemployed, preferring to wait for job vacancies in the union sector. Second, others switch to the non-union sector, increasing labour supply, and depressing wages in that sector below their previous levels. Both scenarios generate allocative inefficiencies. If workers choose voluntary unemployment to queue for union jobs, the economy loses their productive capacity while they are jobless. If union workers transfer to the non-union sector, their marginal revenue product declines below what it would have been, had competitive hiring prevailed in the unionised sector. For the latter effect, labour economists typically estimate a deadweight economic loss of 0.1 to 0.3% of GNP, on the assumption that excess union labour is completely re-absorbed by non-union firms (Hirsch and Addison 1986; Vedder and Galloway 2002). In this scenario, the union creates a labour market failure that would not have existed in its absence. This view is not uncontested, with some labour economists, like Erikson and

Mitchell (2007), arguing that, for reasons of transaction costs and labour quality differentiation, it is more accurate to characterise union monopolies as counter-balancing employer monopsonies.

New view: unions address market failures

Freeman and Medoff (1979, 1984), originators of the 'new' view of unions, acknowledge and accept the neo-classical analysis associated with the 'old' view of unions as labour market monopolists. Yet, they differ by arguing that unions have two faces: a monopoly face that is harmful to efficiency,¹ and a collective voice/institutional response face that is beneficial. This voice view of unions borrows extensively from Hirschman's (1970) idea that societies have two basic ways of dealing with discrepancies between desired and actual social conditions: exit and voice.

Exit is the leaving of one situation for a better alternative, and is synonymous with quitting in the labour market (Hirschman 1970). It is the classic mode of adjustment in a free market-based economic system. 'By leaving less desirable jobs or by refusing bad jobs, individuals penalize the bad employer and reward the good, leading to an overall improvement in the efficiency of the social system' (Freeman and Medoff 1979:2). In the neoclassical model, the combination of costless labour mobility and perfect information produces a pareto-optimal solution, where one worker's welfare cannot be improved without sacrificing another's. In the real-world, exit involves transaction costs: employers have hiring and training costs; employees have moving and re-location costs, as well as any costs associated with unemployment between jobs. Furthermore, exit often fails to convey clear signals about what employers should do to better attract and retain staff. Employees quit their jobs for varied and complex reasons invisible to the employer and sometimes unrelated to the

¹ As will become clear, we are not concerned in this paper with the issue of whether Freeman and Medoff were pre-occupied with a 'mutual gains' agenda of enhanced productivity and the equality of sharing the ensuing benefits because we are particularly focussed upon internal union relationships and processes.

employer's terms and conditions. In any case, Freeman and Medoff (1979) argue that exit predominantly drives firms to improve conditions for workers more likely to leave, mainly the young and inexperienced, so-called marginal workers (e.g., at the margin, in the neoclassical sense). It provides much less impetus to address the concerns of older workers less likely to leave, so-called median workers. Exit is therefore a potentially expensive and even ineffective way of producing optimal labour market outcomes.

Voice entails communicating directly with the organisation to secure improvements in conditions (Hirschman, 1970). It can involve complaints of poor treatment or requests/ demands for better treatment, as with personal grievances and collective bargaining, respectively. Voice has two major potential advantages over exit. First, and most importantly, the communication about what workers want (or do not want) is direct and usually clear. Second, voice offers a potentially lower-transaction cost means of addressing shortfalls between actual and desired conditions because it does not involve any labour mobility (Freeman and Medoff 1979).

If voice is more efficient than exit, employers could provide employees with a voice by involving them in decisions and soliciting their opinions. Why then are unions still necessary? Freeman and Medoff (1979) contend that individual voice is inferior to collective voice via independent union representation for two reasons. 'First, many important aspects of an industrial setting are 'public goods', which affect the well-being ... of every employee, reducing the incentive for any single person to express his preferences and invest time and money in changing conditions that benefit all' (Freeman and Medoff 1979:4). For example, suggesting changes to operational rules for job evaluation, promotion, dismissal, and health and safety management systems and processes has the potential to affect many workers simultaneously. The externalities generated by such public goods provide individual workers with an incentive to refrain from exercising voice themselves and free-ride on the voice efforts of their co-workers (Olson 1965). As a result, individual voice tends to be

under-utilised for public goods in the workplace, a clear example of a market failure. In contrast, a union internalizes these externalities, when a win for one union member has favourable repercussions for the rights and privileges of other union members (Freeman and Medoff 1979, 1984).

The second problem with individual voice is that speaking out exposes the employee to potential retribution from the employer (Freeman and Medoff 1979, 1984). Any complaint, criticism, or negative feedback risks some kind of retaliation from an offended manager whose personal reputation might be on the line. 'Since the purchaser of the labor power, the employer, can fire the protester, individual protest is dangerous' (Freeman and Medoff 1979:5). In contrast, a worker who protests via a union often does so in total anonymity: the management need never know the origins of a particular complaint or demand. Alternatively, a union member can protest knowing that the union has the financial resources and legal expertise to offer some protection from reprisals. In the US, *the National Labor Relations Act* also provides special protections for collective actions, involving unions, unavailable to individuals acting the same way alone (Freeman and Medoff 1979). But there is also a third reason. Not only are unions collective bodies, but they are also independent bodies – independent from employers. An employer can provide for collective forms of interest representation for workers but these are likely to be compromised by their lack of independence from management (Kelly 1995). The interests of capital and labour are not synonymous, even if they may sometimes temporarily overlap.

One of the key determinants of the effectiveness of collective voice is the institutional response from management (Slichter *et al.* 1960). In this regard, Freeman and Medoff (1979:8) argued: 'if management adopts more rational policies toward the work force and uses the collective bargaining process to learn about and improve the operation of the work place and the production process, unionism can be a significant plus'. In the 'real world', organisational slack created by 'x-inefficiency'

provides scope for making productivity-enhancing and cost-reducing improvements (Leibenstein 1966). Managers who respond to union engagement with reflection and investigation are likely to benefit. However, if management resists the union and ignores or rejects its efforts to communicate and share information, the performance of the firm is likely to suffer.

Updated view: unions address behavioural market failures

This paper builds upon Freeman and Medoff's (1979, 1984) conception of union voice by arguing that unions as collective bodies have certain informational and cognitive advantages over the vast majority of their individual members (or, for that matter, the vast majority of individual workers), enabling them to at least partially address the four BMFs described earlier. These advantages arise through three related effects, what are, henceforth, referred to as union membership, expert, and organisational learning effects. The union membership effect refers to the informational benefits of having members whose experiences provide important signals about the sorts of challenges and concerns workers might encounter and have over their working lives and with what regularity. How the union membership effect addresses each specific BMF is discussed in more depth in later sections of the paper. The expert effect refers to both the informational and cognitive benefits of having specialist union officials, both lay and employed, to deal with member problems on their behalf. The decline in the extent of collective bargaining, the atrophy of workplace activism despite the turn to 'union organising' and the fragmentation of employment contracts have meant that the value of servicing individual member's needs, via these officials, has increased.² These union officials, such as servicing, legal, and health and safety officers, are intermediaries between the union members and management who gather, distil, record, and distribute the information secured from

² This does not necessarily imply that 'servicing' is a more appropriate overall approach than 'organising' for members needs still require individual servicing even within the organising model (see discussion section). In this regard in Britain, the GMB union - one of the largest general unions and the third biggest union - has for well over a decade implemented an organising approach and promoted itself to new members as 'GMB – experts in the world of work'.

members, and attempt to resolve their problems. Notwithstanding any deficiencies in members providing information through lack of participation and officials interpreting information based upon their own predilections (both issues which we return to later), the quantity and quality of the data acquired through their own or fellow officials' experiences makes them less reliant on system 1 mental heuristics to make important decisions and, thus, less susceptible to cognitive errors. For example, information derived from a minority of members currently affected by a particular issue can be used to help safeguard the interests of the majority in the future on that issue. In other words, important information can be conveyed which for reasons of bounded rationality is not sufficiently understood by individuals acting alone and does not inform individual contracting decisions. The organisational learning effect refers to the process by which the experience and knowledge acquired by unions as collective bargainers over time with employer bargaining partners becomes an expertise and form of social capital (see Huber 1991, Huzzard 2000, Hyman 2007, 2011, Kaufman 1992, 1999). This expertise relates to employers, managers and management *per se* as well as particular employers, managers and management as well as styles of management. So, as a result of repeated bargaining encounters with management, unions have a tendency to learn how to more productively align their demands and attendant strategy and tactics in order to optimise benefits, minimise sacrifices and neutralise any management recalcitrance. Often this means being less optimistic and more 'realistic' about the most that can be wrested from an employer via strike action. There is a close and intimate interrelationship between the three types of effects with a two-way process of osmosis occurring between each (membership-expert, membership-organisational learning, expert-organisational learning). For example, both the membership and expert effects can help positively inform the organisational learning effect. How these three effects relate to each BMF is now explored.

i) Short-termism

Rational choice theory predicts that individuals make decisions reflecting all associated short-term and long-term costs and benefits (Sunstein, 2014). However, the evidence shows that individuals prefer immediate over delayed gratification and mainly consider short-term rather than long-term costs (Loewenstein and Prelec 1992). Short-termism reflects how the human brain is wired to systematically favour the short- over long-term. The system 1 mind is fundamentally myopic, as it relies on immediately available sensory information: 'what you see is all there is' or WYSIATI (Kahneman 2011:85). For system 1, it's like the future does not exist at all (Sunstein 2014). System 2 is capable of more abstractly thinking about the future, but the concentrated effort required is a mental strain and, thus, normally avoided. Avoidance leads to procrastination over future concerns and henceforth to status quo inertia, with many decisions postponed until the long-term has become the short-term. By that stage, it is frequently too late or costly to take appropriate action. For instance, individuals commonly delay enrolling in a pension plan, sometimes too belatedly to save much for their retirement (Thaler and Benartzi 2004).

Short-termism is also a product of time-inconsistency, where decisions about the short- and long-term involve different neural pathways (McClure *et al.* 2004). The parts of the brain preoccupied by the short-term also focus on the self, and so considerations of self-interest are mainly limited to short-term costs, consequences and conditions. This explains why individuals often neglect to take steps with small, short-term costs and large, long-term gains. It is almost as if the long-term self is a stranger: someone we do not really care, or even know, about (Sunstein 2014). The separation of short- and long-term selves can create what are called 'internalities'. The term 'externality' refers to the cost (negative externality) or benefit (positive externality) of a decision, which arises to an external party with interests not normally considered in that decision (Laffont 2008). The term 'internality' refers to the cost (negative) or benefit (positive) of a decision, which arises to the long-term self whose interests are also not generally considered (Herrnstein *et al.* 1993). Negative internalities occur when we '... make choices that injure our future selves' (Sunstein 2014:38). Some

choices can involve both an externality and internality. For example, smoking involves a negative externality for non-smokers in the smoker's vicinity, and a negative internality for the smoker, in both cases involving an increased risk of future cancer.

Employment involves both short-term and long-term issues. When an employee joins an organisation, some matters must be determined more or less immediately, for instance, the salary or wage, the place of work, or the hours of work. These issues regarding the short-term loom large in the employee's mind, and are normally discussed, addressed, and included in the employee's individual contract. Meantime, there are other matters, normally of much less immediate concern, which are much less likely to arise at the time of contract negotiations or discussions between individual employee and employer concerning, for example, retirement age, pension programme, additional leave for long service, higher severance pay related to length of service, and so on. None of these issues is pressing; none involves short-term costs and benefits. A rational decision-maker would use any opportunity at the start of employment to negotiate more generally favourable terms and conditions, whether short- or long-term. However, individuals in the real-world focus upon improvements to the short-term elements of their contracts (Bar-Gill, 2012).

Why are unions better at focusing on the long-term than their individual members? After all, unions merely comprise individual members, each with his or her bias to short-term decision-making. The union membership and organisational learning effects are crucial here, because the long-term for some, such as the young, the newly hired, the healthy, and those free from harassment and so on, is the short-term or current lived reality for others, such as the old, the soon-to-retire, the sick, the injured, and the harassed. In other words, what might or will happen to some in the future is already happening to others in the present. The union represents these different binaries: those who do not need the union's help at the moment and those who do. A union can learn from the experiences of the latter to better educate, advocate, and negotiate for the former, long in advance of when issues

are likely to manifestly arise for them. Critically, in collectively discussing these needs across these binaries, members as a whole can then take a more rounded view of what the priorities of their union should be. So a union often has a better appreciation of what their members might want or will want and need into the longer-term future than they do themselves, because a union takes a more rounded view as a result of looking at its membership's needs as a whole (breadth as a spatial dimension) and over time (projecting forward from the present as a temporal dimension). As a result, the union can then address a serious market failure arising from the internalities effect: the problem of self-interested individuals basing decisions mainly or solely on short-term costs and benefits at the expense of the long-term. Thus, as in the case of trying to protect the value of pension schemes, those more immediately affected by the detriment (i.e. those close to retiring) help protect the interests of those not near retirement (younger and newer staff in the pension scheme).³ The expert effect also plays an important, supporting role here, for union officials provide the specialist assistance to those most in need of the union's services. They develop a strong sense, from repeated experience, of what can or will happen to union members over the long-term. Lessons are drawn, recorded, shared, and used to inform contract negotiations and other dealings with management.

ii) Inattention to hidden but important attributes

Rational choice theory avows that individuals make decisions after careful consideration of all available information (Sunstein 2014). However, evidence from psychological experiments demonstrates that the human capacity for attention is seriously limited (Bar-Gill 2012; Kahneman 1973). Individuals can typically attend to a limited range of situational attributes for a limited period. Inattention occurs because of situational complexity: there are simply too many attributes for the

³ It should also be noted that a reverse effect is also possible, namely, those whose short- to medium-term income is relatively more affected by seeking higher pay rises than those close to retiring have a greater interest in pursuing such pay rises. In doing so, they also help further the interests of those nearing retirement by boosting pay (including pensionable pay).

mind to attend to everything simultaneously, without causing information overload (Bar-Gill, 2012). The system 1 mind copes with complexity by scanning a situation for whatever is salient and then focusing the mind on that. It implicitly equates salience with importance. In ancestral conditions, high salience would have been a good indication of potential relevance to survival. To take one example, the high salience of a nearby lion would have seized the mind's full attention and prompted appropriate action. By contrast, the system 2 mind can be intentionally focused on any attribute in a situation. However, the exertion of mental effort this demands redirects our attention from all other situational attributes.

People tend to assume that significant events, objects and phenomena around us will automatically catch our attention (Sunstein 2014). However, research suggests that people often overlook what is important because it lacks salience (system 1) and/ or our minds are too concentrated on something else (system 2) (Brademeier and Simons 2012; Simons and Chabris 2010; Conway *et al.* 2001). First, salience is likely to be limited, if something cannot be easily seen, smelt, heard, touched, or tasted ('what you see is all there is' - WYSIATI) (Kahneman 2011). Yet, in our modern world, the intangibility of many important, situational attributes leaves little or no sensory impression on the system 1 mind. As an example, Hossain and Morgan (2006) found that bidders in an eBay auction were well aware of item prices, as these were prominently displayed at the top of each listing and, thus, not difficult to spot. In contrast, the bidders generally failed to account for shipping costs in their bids, as these were to some extent hidden and, for people more used to shopping at conventional stores, unexpected. More generally, studies consistently show that inexperienced individuals frequently consent to contract clauses that have low salience but involve significant negative consequences (Agarwal *et al.* 2017; Heidhues and Koszegi 2015; Koszegi 2014).

Second, the complexity of our modern world also often demands the full attention of the system 2 mind to comprehend it. When our system 2 mind is distracted by one attribute, we can easily miss

what is happening around us. For example, half the subjects in one famous experiment were too engrossed in counting ball passes between basketball players to notice a person in a gorilla suit, appearing in the background, waving his/ her arms (Chabris and Simons, 2010).

Employment is complex in at least three key respects. First, the variety and number of potential terms and conditions⁴ can overload the system 2 mind with information and significantly challenge the system 1 mind to discern much that is salient. Second, employment contracts can be written in complex and confusing language, and filled with legal or at least employment law jargon, taxing the system 2 mind's capacity to understand and leaving little salient for the system 1 mind to notice in the bureaucratic detail. For instance, the collective agreement between Fire and Emergency New Zealand and the New Zealand Firefighters Union is 144 pages long and contains 74 clauses, over 400 sub-clauses, nine charts and tables, and three schedules (NZ Professional Firefighters' Union 2015). In Britain, the terms and conditions of firefighters are governed by the 'grey book' of conditions of service, an 80-odd page document. Third, specific employment issues can also vary significantly in their inherent salience, when considered separately. The simplicity of some matters makes them very visible, whereas the opacity of others, despite their importance in some cases, makes them virtually invisible. For instance, as a single number, the employee's wage or salary, is usually obvious. It has high salience and is invariably included in the employee's contract as well as the letter of appointment. The same is likely to be true for allowances, leave, overtime, and working hours provisions. At the other extreme, the intangibility and intricacy of many human resource management processes obscures their inner workings. Attention to these elements requires effortful, time-consuming, and potentially stressful system 2 scrutiny. Yet, a complicated performance

⁴ These terms and conditions are as broad as wages, benefits (holidays, other leave arrangements, sick pay), perks (e.g., parking, meals, subsidised insurance, gym membership), pensions, severance terms, health and safety, working hours, promotions, training, performance appraisal, dismissal, work tasks, and workload, to name just a few categories.

appraisal or promotions process, to take just two examples, can have major effects on an employee's career success and satisfaction.

Compared to the vast majority of individual members, unions are better at attending to the many, varied, and potentially complex aspects of the workplace because they are, relatively speaking, resource rich and organisationally intelligent. Most obviously, there are the expert and organisational learning resources to draw upon in order to navigate through and make sense of these aspects as a prelude to deciding upon response and attendant action. The union membership effect here is also again important, because what is salient for one member might not be for another; salience is the product of direct personal experience. Thus, having a baby involves many obvious challenges to anyone with current or recent experience of parenthood. Likewise, the aftermath of a work accident has readily apparent implications for the injured victim. Each individual often has his or her own issues at work, and these will be more salient to him or her at a particular point in time. If help at the workplace is required in these sorts of situations, the union can learn about many of the different trials its members are facing. What is salient to the union, as a whole, is likely to cover a much broader range of circumstances than to any one member alone (or small group of members).

The expert effect again complements and reinforces this union membership effect. Union officials are the intermediaries who collect, document, and disseminate the information concerning members' problems. Thus, they play an important role in raising general awareness, in rendering the invisible visible (or salient). In addition, they are the specialised experts in any given area of union business; they regularly focus and apply their system 2 minds to one or a limited number of complex tasks as a normal part of their respective jobs. For an ordinary worker, there may be little salient in a complicated dismissal procedure for the system 1 mind to quickly and casually absorb. For a union specialist, repeated experience with dismissal affords opportunities to apply the purposeful and thoughtful system 2 mind to learn about the intricacies of the subject. Insights accumulated by such

experts can be shared with others in the union and used to formulate new policies and demands. Union officials can also draw upon their experience and knowledge of employment law and legal procedures (aided by lawyers employed by unions). An example involves what constitutes the basis for pursuing equal pay claims for women, given that the pay of male manual workers has been often higher as a result of productivity bonuses women white collar workers were not eligible to receive. In this instance, the organisational learning effect can also be highlighted, whereby unions with a collective, longer-term memory can also deploy the lessons of the past to not just gain the advantageous application of existing law but also seek to beneficially change the law through political and legal actions.

iii) Unrealistic optimism

Ultra-rational individuals would make decisions in a very detached, objective fashion, having proper regard to all positive and negative information about costs, consequences, conditions, and probabilities. In the real world, individuals have a strong cognitive bias towards unrealistic optimism: '[m]ost of us view the world as more benign than it really is, our own attributes as more favourable than they truly are, and the goals we adopt as more achievable than they are likely to be' (Kahneman 2011:255). The over-estimation of our own capabilities and qualities has been coined the above average effect or illusory superiority (Hoorens 1993; Weinstein 1987). For example, 68% of academic respondents at the University of Nebraska rated themselves as top quartile on teaching ability, and 90% as above average (Cross 1977).

Unrealistic optimism has many advantages in everyday life that would have increased the odds of survival in ancestral conditions. It can '... spur activity, lift spirits, promote resilience, and ensure that people continue to try even in tough circumstances' (Sunstein 2014:45). Optimists have stronger immune systems, and so live longer and fall sick less frequently (Tindle *et al.* 2009). Others also tend

to prefer living and working with optimists (Helweg-Larsen *et al.* 2002). Of course, too much optimism does have a downside, most notably the tendency to take too many risks and too few precautions (Bar-Gill 2012; Radcliffe and Klein 2002). A bias towards employee optimism is likely to manifest in over-confidence about an employment relationship. If employees have an illusory sense of superiority in relation to their colleagues, they will believe they are more likely to gain job satisfaction, be promoted, paid a bonus, and/or earn a pay increase, but less likely to have a work accident, fall sick, or suffer discrimination. Over-confidence in positive things happening could cultivate a naïve trust in management 'to do the right thing' or 'be fair' in exercising its prerogative. Correspondingly, over-confidence in negative things *not* happening could foster a naïve belief that contractual protections are unnecessary. Moreover, research suggests that a positive mood can amplify such excessive optimism (Helweg-Larsen and Shepperd 2001). Thus, the elation and relief of attaining employment, especially after a lengthy job search, could reinforce a newly hired employee's over-confidence. An over-confident employee is likely to consent to a short contract, containing few protective provisions and leaving much to management's discretion. The evidence confirms that most individual employment contracts are of this basic type (Brown *et al.* 2000).

Excessive optimism tends to persist, because individuals are slow to learn from unpleasant experience (Sharot 2011, 2012). Research by Sharot *et al.*, (2007) showed individuals rapidly update their views for good but not bad news. In fact, they generally resist any disconfirming negative information that challenges their positive perspectives. Ready acceptance of such information would force people to re-evaluate the upbeat views they have of themselves, both their capabilities and achievements, and leave them potentially feeling disempowered and depressed. Individuals tend to avoid such radical and potentially harmful self-reassessments by, for example, avoiding any exposure to the disconfirming evidence, denying its validity, and/ or ascribing it to unique or unusual circumstances (Festinger, 1957).

Unions are much less susceptible to excessive optimism than their individual members as a result of longer and wider memory and experience (organisation learning effect) and hard-bitten practice (expert effect). The union membership effect also plays a major role here. One or two bad outcomes can be ignored or rationalised by the affected individual (Festinger 1957). If the same or similar negative outcomes keep re-occurring across the membership, certain unsavoury truths must be faced; frequent experience reduces the optimism bias (Helweg-Larsen et al., 2007). When many workers suffer in the same way, as with, for example, contracting an industrial disease, the hard lessons are eventually learned. The expert effect is complementary. Union officials are as prone as individual members to excessive optimism but repeated exposure to the same sets of problems with the same sorts of consequences, in their specialist service roles, is likely to disavow them of any misplaced positivity; experience reduces the optimism bias, at least eventually (Helweg-Larsen et al., 2007). Furthermore, union officials have less ego invested in deceiving themselves about manifest realities since it normally involves someone else's struggles although they may be prone to promise to deliver more than they can in order to gain, at the outset, membership satisfaction. But it is more likely their hard-bitten experience and their appraisal of the facts is unlikely to be tainted by the need to retain a sense of self-worth and a cheerful outlook on one's own life. On the contrary, and seeking to align available resources with (realistic) desired outcomes, union officials are employed to deal decisively and effectively with union members' problems. This applies specifically to expertise, skills and knowledge. Here, again, there is some overlap with the organisational learning effect, for unions as bodies with long collective memories and experience are good levellers of members' unbridled and naïve optimism when it comes to bargaining demands and processes. Ultimately, they are able to succinctly state to members: 'If you want outcome 'x', you must be prepared to make sacrifice 'y' where 'x' is an above inflation pay rise and 'y' is amount of wages lost through striking (pay by number of strike days). Here, 'force of argument' is rendered necessary without being sufficient so that the 'argument of force' also needs to be applied. For example, the leader of the fire brigades' union in Britain told its 2018 annual conference: 'In 1977 we had a nine-week all-out strike

over pay. If we are going to have strike action with this government, that is the level of commitment we would need. We do not think we are at that stage yet' (*Union News* 7 June 2018). Meantime, the leader of the main teachers' union in Scotland told its 2018 annual conference on its pay claim: 'We need to keep building the campaign and building the pressure. It is not enough to have the arguments – we have those already. It is not enough to have the moral high ground - we already occupy that. It is not enough to hear sympathetic noises - welcome though that is. ... It took six days of strike action for [fellow] FELA [membership] to win its dispute – remember that' (General Secretary's Address, 8 June 2018).

iv) Probability estimation

The decision-maker in the rational model has all the information needed to effortlessly and instantaneously estimate all probabilities, and without cost. In the real world, decision-makers face uncertain and poorly understood situations. The system 2 mind can estimate probabilities reasonably accurately, but the time and information required to do so are usually lacking or costly to obtain. The system 1 mind employs a number of mental heuristics to estimate probabilities quickly but often not so accurately. These heuristics rely on the perceived characteristics of future situations to forecast their likelihood (Kahneman 2011).

With the availability heuristic, the system 1 mind determines that outcomes that come to mind readily and vividly are also likely (Tversky and Kahneman 1973). Individuals normally have a stronger memory of events experienced often, and that is usually a good indication that the same events are likely to happen again. However, some conditions upwardly bias our likelihood perceptions of events because of their high salience. Examples include novel and dramatic events in media stories (Eisenman 1993), incidents discussed repeatedly via our social networks, (Fischhoff *et al.* 2005), and events with major personal significance (Slovic *et al.* 2004; Zaleskiewicz *et al.*, 2002). Individuals also

tend to over-estimate the chances of easily imagined but rare catastrophic happenings while under-estimating the chances of less dramatic but more mundane situations (Lichtenstein *et al.* 1978).

The availability heuristic has critical implications for the individual employee's contract discussions or negotiations. Any event that is mentally unavailable to the employee is unlikely to be considered in formulating bargaining demands. Some future events might be hard for employees to visualise, even if they are virtually certain. Younger employees struggle to imagine themselves as old, retired, and needing a pension. In one study, 20-year-old participants who had seen 'aged' photographs of themselves at 70 allocated twice as much to a hypothetical pension plan as 20-year-olds who had not seen an 'aged' photograph (Hershfield *et al.* 2011). Other common events inherently lack salience, as, for example, with a worker dying quietly of a work-related cancer, in bed and at home. Alternatively, some events are likely to attract little attention because those involved keep the details confidential, as in the case of drug addiction.

With the representativeness heuristic, an individual faced with an uncertain situation will attempt to recollect a comparable situation they have heard about or personally experienced, and then deduce that the probabilities of the two situations will be similar (Tversky and Kahneman, 1973). However, over-generalizing from such cases can bias probability estimates. For example, if the sample of personal experiences is small, observed patterns or frequencies from the past are likely to be poor indicators of future patterns and frequencies. Likewise, if old and new situations are only superficially similar and are otherwise entirely different, and thus independent of each other, forecasting the likelihood of the latter based on the observed likelihood of the former will be inaccurate.

The representativeness heuristic can lead individual employees to the erroneous view that, because they have certain rights and protections in some laws, they have the same rights and protections

across all seemingly similar aspects of employment and, thus, do not need comparable protections in their employment contracts. Empirical research shows that employees generally believe that they have far more employment rights than they actually do. Approximately 80% of employees surveyed in one US study did not realise that dismissals motivated by: personal dislike, a mistaken belief the employee had stolen money, retaliation for reporting theft by another employee, and a plan to hire a replacement worker at a lower wage were all lawful under the employment-at-will doctrine (Kim 1997:134). More than 70% of participants in Freeman and Rogers' (1999:119) US study also wrongly indicated that employees could not be fired without a reason or for refusing unsafe work; more than half also wrongly suggested that they could not be permanently replaced while on strike. The apparent core belief, consistent with the majority's correct and incorrect views of employee rights in both studies, is that '... anything that is blatantly unfair at the workplace must be illegal' (Freeman and Rogers 1999: 120). Employees appear to over-generalise what they know, using the representativeness heuristic. For instance, given laws prohibiting discrimination on race, gender, and religion, employees might falsely conclude they are protected from other forms of discrimination or arbitrary/unreasonable treatment. Similarly, given due process rights in criminal cases, employees might incorrectly conclude that there are also due process rights for employees dismissed for misconduct under employment-at-will. Likewise, an employee might wrongly infer that a constitutionally guaranteed freedom of speech *vis-à-vis* the state also applies to employment.

Unions have fewer issues in estimating probabilities. With the union membership effect, unions often have information from across a wide array of situations and contexts and with their 'sample' in each providing for statistical significance (namely, many thousands of members). When interpreted and analysed with the help of the expert and organisational learning effects, unions can then accurately estimate the base-line probabilities of all sorts of events in their members' working lives. So, they will have a better idea of how likely members are to be fatally injured on the job, made redundant, or spend time in hospital for a work-related operation or illness. Even casual observation

by union officials, the experts, over a lengthy period can provide a reasonably good sense of how often certain incidents occur. For instance, a union official who handles all of one union's sexual harassment cases is likely to have a reasonably good idea of who is likely to be harassed, by whom, in what manner, and how frequently as well as how effective different remedies are. Here, the union membership effect in providing information and expert effect in analysing it tend to be reinforcing. The salience of the organisational learning effect can be highlighted by allowing decisions about how hard and fast a union should push on any one issue at any one time. For example, it may concern being willing to advocate to its members the appropriateness of offering a pay freeze and short-time working in a period of recession in order to preserve jobs and then being willing to advocate action to gain a back payment with interest on top of a normal inflation pay rise in times of economic growth.

Discussion

In recognising the three effects were presented in an idealised manner, this section examines the macro- (environmental) and meso- (institutional, organisational) factors which will influence their application and impact. However, salient empirical studies of unions are not available to cite, for previous research has not addressed these issues, confirming the novelty of the focus on behavioural market failures. This section begins with some points about the environmentally embedded nature of the three effects.

First, the informational and cognitive benefits derived from the membership effect extend well beyond any median worker effect, as originally proposed by Freeman and Medoff (1979, 1984), because they do not depend upon information originating from an 'average' or 'median' worker at all. For instance, if 5% of a work group has an industrial disease, this still conveys important information (about policies concerning prevention, amelioration etc.) to the other 95% who do not

currently have the disease but might contract it in future. The same applies to workers who have been unjustifiably dismissed; victims of sexual harassment; retirees on inadequate pensions; and worker-parents who do not have sufficient parental leave. Each of these situations might not be typical of the median worker at all, but the experiences of such people convey important information, which, for bounded rationality reasons (BMFs), is not sufficiently understood by most individuals acting alone to properly inform individual contracting decisions. Second, the processes associated with repeatedly undertaking collective bargaining and individual member representation (e.g., personal grievance handling) facilitate the development of intuitive skills for union personnel, in terms of understanding procedure, attitudinal restructuring, deploying tactical advantage and so on. This is because of environments that are sufficiently regular as to be predictable, and the opportunity to learn these regularities through prolonged practice. As a result, the acquisition of intuitive expertise through repeated collective bargaining and individual member representation encounters is similar to the learning that occurs through repeated chess matches or firefighting operations (see Kahneman 2011: 234-244).

We now turn to the issue of unions as organisations to assess the environmental obstacles in fully realising the three effects. To the extent that unions 'score' differently on the following characteristics, the realisation of the three effects varies. Unions that are less participative, less democratic and more authoritarian and (national) leadership-led are less likely to realise the benefits of the membership effect. In particular, a leadership that is less accountable to the membership will be less compelled to act upon the membership effect.⁵ But equally, participative and democratic unions riven by disputes between members and characterised by sectionalism or factionalism might also not realise the membership effect to its fullest extent. In such cases, the conveying of information and its assessment may be superseded by other internal processes and priorities. And

⁵ This would include analysis ranging from the Michels-ian to Marxian versions of the 'union bureaucracy' thesis (see Darlington 2014, Darlington and Upchurch 2012, Kelly 1988).

unions which are less able to realise the application of the membership effect may come to rely more upon the expert and organisational learning effects.

Unions with fewer internal resources and staff are less likely to fully realise the expert effect. Ruptures and discontinuities in union structures and staffing through mergers and downsizing (brought about by financial problems) could also undermine the expert effect.⁶ On the other hand, unions with an organisational culture dominated by union officials (especially employed officers and senior lay officials) might be better able to realise this effect (albeit with possibly detrimental implications for the membership effect). Unions capable of maximising the fullest extent of the organisational learning effect are likely to command stable organisational, membership and financial environments which allow them to reflect upon their past successes and failures and then draw appropriate lessons to guide present and future actions. They are also unions that are not so culturally inward-looking as to fail to appreciate the fates and fortunes of other unions. Unions dominated by a leadership that is narrowly based on section and/or faction may find this more difficult to do – they may be able to easily draw lessons but these may not be the appropriate ones. For example, unions with leaderships which are ‘male’ (gender), ‘pale’ (race), ‘stale’ (length of service) and ‘frail’ (age) may not be sufficiently responsive to membership concerns to take on issues relevant to younger, female and minority ethnicity workers. Union leaderships often need to act to promote the interests of future members at the expense of current members – where an occupation or trade is disappearing and its successor still needs to be colonised and captured – but are often unable to do so because of the influence of current members. But, regardless of how particular unions ‘score’ on these different measures, unions *per se* also have a strong tendency to be reactive and, therefore, driven to responding to immediate and short-term challenges, and to experience difficulties in acting strategically (Hyman 2007, Gall 2011). And, unions as aggregations of different

⁶ Indeed, unions which become bigger and more diverse in terms of their memberships but with proportionately fewer staffing resources - as a result of mergers brought about by the imperative of making cost savings - may find it more difficult to realise the membership effect too.

sections of members (by trade, special interest (race, gender etc), sector and so on) also experience difficulties in formulating, through democratic processes, overall policy, as well as then carrying out united action in pursuit of these policies, in efficient and effective manners. In other words, there can be collective cognitive failures, caused by cultural myopia and reflected in strong normative isomorphism.

The extent to which unions realise the membership effect is not necessarily, or even entirely, dependent upon whether unions experience overall membership growth, stasis or decline (or the particular sectoral dimensions of this⁷). Here, the ability to act as informed agents of members' common good is predicated far more upon the quantity and quality of membership participation, whatever their numbers. Broadly-based and relatively high membership participation rates provide for relatively more robust information and prevent such information being more skewed more to one internal constituency (like sector or trade groups) than another or more towards activists rather than members, thus, in the process becoming less representative. Thus, variations in membership participation rates by internal constituencies may lead to variations in realising the membership effect. That said, having more members *per se* may allow the quantity of information to take on a particular qualitative dimension whereby it becomes more statistically more reliable in its degree of representativeness. Moreover, the health of union membership can have another important bearing. Thus, though the private sector is the predominant economic sector by employment numbers within advanced economies, union density in it is very low - for example, Australia <10%, Britain <15%, Canada 15% and the United States <10%. Within the expanding parts of the private sector, namely, the services sector (such as hospitality), it is often considerably lower than these aforementioned densities. The import of this is that unions may tend to operate and behave in ways that are grounded in past dynamics and imperatives (despite attempts at

⁷ To sector, could be added age range (with 16-24 years olds largely un-unionised compared to their 50 years old counterparts) and regional/spatial dimensions (see below).

organisational innovation) because of the particular constituencies they have represented and continue to represent. Consequently, they are generally less open to and able to move into new and necessary areas of membership organising. This impacts upon the membership effect inasmuch as the very small proportion of current memberships which are located in economic growth areas militates against having a fuller command of the information required to relate to represent them and future members in these particular growth areas. In this regard in Britain, and even though they remain small, new specialist unions (such as the IWGB and UVW) appear to have made greater progress in unionising couriers and cleaners in the 'gig economy' than larger, longstanding general unions (like the GMB and UNITE) because of their dedicated and exclusive focus upon particular groups of such workers. Finally, whether the more general 'sword of justice' (Flanders 1970:15) role of unions has now been eclipsed by their narrower 'vested interest' (Flanders 1970:15) becomes an issue with union membership decline. This is especially so where the membership effect is based upon a small and often skewed distribution of members such as very low absolute and relative numbers within particular parts of the private services sector such as hospitality (compared to higher absolute and relative numbers in not just most of the public sector but sub-sectors of the private services sector like transport and communication). Yet these points still need to be held in regard of two other ones. Thus, on the one hand, as individual unions tend to seek only to represent the collective interests of their own current and specific memberships and do so in a sectional way (despite the growth of conglomerate, general unions and often rhetoric to the contrary), this seldom becomes a manifest issue for particular unions even if it is one for unions in general and for workers *per se*. Indeed, the issue of low absolute and relative membership may not matter much with regard to the membership effect if the bargaining agenda and context for a specific group of members is particularly idiosyncratic to them. And, on the other hand, absolute membership numbers are still a solid basis for gaining the requisite information for the membership effect (subject to participation rates). In the United States for 2018, a 6.4% private sector density still equated to 7.6m members (51% of all union members,

albeit skewed mainly towards northern states) while in Britain, for 2017, a 13.5% private sector density still equates to 2.7m members (43% of all union members, albeit skewed mainly towards regions).⁸

Further recent trends have implications for the realisation of the three effects. First, membership participation in internal union democratic processes has generally declined with a fall in union activism, and so national union leaderships are now less accountable to members and more likely to pursue their own preferences and interests, which may or may not align with members' interests (however defined). Second, as many unions become larger after mergers and do so in a period of declining member activism, the significance of (union) bureaucratisation increases, leaving unions potentially less responsive to what members want and know. Third, the weakened bargaining power of unions leaves them less able to bargain for improvements predicated on the membership effect. Fourth, with union decline, many unions prioritise organisational survival over their members' interests, at least in the short-term. For example, weakened unions are more likely to moderate their demands and even make concessions to avoid costly strikes or lockouts, lessen employer antagonism, and retain union recognition agreements with employers.

One final point is apposite. The turn to 'union organising' in the form of the 'organising model' contra the 'servicing model' does not undermine the argument presented in this paper for two reasons. First, in practice, 'organising' and 'servicing' are not incompatible or mutually exclusive. Even 'organising' unions provide aspects of 'servicing' for individual members, and successful 'organising' outcomes are difficult to achieve where they are defined as leading to self-organised workplaces (see Gall and Fiorito 2011). Second, the distinction between 'organising' and 'servicing' is a strategic issue that does not necessarily in and of itself produce different views about union

⁸ Of salience here is that the union 'premium' or 'mark-up' of the positive difference for union members between the wages of union and non-union workers still remains surprisingly significant in many countries like Britain and the United States (Bryson 2014, Farber *et al.* 2018) despite union decline.

members' material interests (especially via the membership effect). This is because the difference between the two (pure) approaches concerns how to best realise these material interests (putting aside issues of democratic and participative citizenship).

Conclusion

Deploying insights from behavioural economics, this paper has begun to shed light on understanding why unions as collective organisations of workers have the potential to correct and avoid BMFs that face individual workers, namely: focusing on short-term aspects of the employment situation, without duly considering future events and issues; inattention to important employment issues whose complexity renders them virtually invisible, or non-salient, to the individual worker; being unrealistically optimistic about the future course of the employment relationship, and thus under-prepared for the possibility of negative outcomes or events; and having a poor understanding of probability and consequent failure to address future events with a high likelihood or even virtual certainty. Through three effects (membership, expert, organisational learning), unions, it was argued, have the potential capability and capacity to address these BMFs. How these effects are realised in practice and to what extent they are realised, it was suggested, **depends upon a wide range of contending and counter-vailing constraints and opportunities. In particular, we examined whether unions are now so enfeebled as to not be able to realise the membership effect.** Whether there is the potential for these three effects to operate across unions through (inter-union) organisational learning remains an issue to be theorised.

Behavioural economics is able to help deliver these insights, in contrast to industrial sociology, organisational studies and industrial relations, because it is able to integrate a psychological approach to issues of motivation and decision-making with analysis of the processes of (organised) collective representation derived from industrial relations and studies of unions. However, at the

moment, these insights remain untested in the empirical laboratory of fieldwork and unproven by reference to other studies. Over the last fifty or so years of research and scholarship on unions, significant literatures have emerged, *inter alia*, on i) union and their members' contributions to productivity and efficiency as a result of their tacit knowledge and organisational commitment; ii) union members commitment to, and participation in, their unions in terms of developing democracy and bargaining power; iii) studies of unions as organisations (structure, culture, functions, processes); iv) workplace bargaining and workplace unionism; and v) workplace union learning and union education. This journal amongst others has published work on these areas. Yet these literatures have not even tangentially touched upon the issues explored in this paper. In order to develop the research agenda as well as the portent of policy implications, fieldwork is needed to test the insights through the formulation of hypotheses that are operationalized through qualitative and quantitative data generation. Among these would be whether unions or other forms of collective voice are most able to play this role, and what the constraining and facilitating factors are. We hope to have begun to lay out a productive research agenda for this area of study.

Acknowledgement

We thank the two reviewers for their help in revising this article.

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