THE FEDERAL FOOTBALL LEAGUE:
A COLLECTIVE BARGAINING SIMULATION

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TEACHING NOTES AND OVERVIEW FOR USE IN CLASS

The last decade has witnessed two related phenomena which form the motivation for the development of this bargaining exercise as a teaching tool. Within the industrial relations arena, enterprise or collective bargaining have replaced arbitration as the major processes for wage determination and dispute resolution. Over the same period (Australian) sport has witnessed the rise of professionalism and emergence of professional bodies intended to represent players in negotiations with sporting clubs, leagues and national associations. These two developments have, not surprisingly, made industrial relations an issue of growing importance in the sports industry. This collective bargaining simulation is intended to aid in the teaching of industrial relations issues in sport. As will become apparent, we also point to a number of additional applications.

These notes provide the instructor with both the guidelines for operation of the simulation as a class exercise and a series of discussion topics to maximise the learning potential of that exercise. With good instruction, students should find the simulation both entertaining and informative.

The simulation has three primary objectives. First, it is designed to enhance students’ knowledge of core concepts relating to the management of professional sporting leagues. Second, the simulation seeks to provide instructors with a device to allow the development of (general or industrial) bargaining and negotiation skills. Third, it is designed to provide as close to a real life illustration of the value of bargaining and game theoretic ideas by exploring these principles in a controlled yet applied context.

Based upon trials at several Australian universities, four possible applications are conceivable. First, the simulation provides a means to explore approaches to (sports) management and industrial relations in greater depth as well as the opportunity to investigate the relevant legal and economic principles in context. Second, it would be appropriate for subjects in one of the following subject areas where the theory and principles of bargaining are covered: sports management or administration, sports law, economics, or industrial relations. Third, it may be used as a teaching aid in the more general domain of applied microeconomics and game theory. Finally, the advanced instructor may extend the simulation scenario into a ‘hypothetical’ style exercise by assigning students the role of various stakeholders in the professional sporting industry. Suggested topics and an introductory bibliography are included to aid instruction of the first three applications.

The Simulation Scenario

The simulation is based upon the negotiation of a Collective Bargaining Agreement (CBA) between a fictitious Australian-based professional (Australian Rules) football league – the Federal Football League (the FFL) – and the union representing professional footballers employed by the league – the National Association of Professional Footballers (the NAPF). The scenario is loosely based upon events in the recent history of the Australian Football League (AFL), the birth of the National Rugby
League following the ‘Super League War’ between Rupert Murdoch’s News Limited organisation and the Australian Rugby League and the structural issues common to professional sporting leagues in Australia, North America and Europe. The bargaining agenda is a given set of conditions over which the NAPF seeks to establish a CBA with the FFL. The issues are confined to:

1. The length of the agreement;
2. The introduction of a player recruitment draft;
3. The introduction of a salary cap on team expenditure and the minimum required number of games to be played for an individual to qualify for a ‘marquee player’ exemption from the salary cap;
4. The minimum annual player salary; and
5. The right of players to wear their own choice of football boot.

The agenda is intentionally constrained to ensure that a resolution is feasible and the possible trade-offs are limited. It also enables us to identify a hypothetical outcome which represents an optimal ‘win-win’ situation for both parties. Achievement of this outcome is another question, and will be dependent on both the skills of the negotiators and the situational constraints they face.

The ‘value’ attached to individual conditions and wage increments is represented in a schedule of points provided to both parties at the bargaining table. The aim is for parties to reach an agreement which maximises that party’s total points, however, the points value assigned to each issue differs for each side. In this sense, the points schedule is the ‘driver’ of the simulation; it provides the parties with their preferences and the motivation to seek certain outcomes.

We also incorporate three important features of any bargaining scenario: power, information asymmetries and time. The first two issues are incorporated by providing each party with confidential information regarding their points schedule and the general decision-making context, and by making the costs of multiple bargaining sessions (and therefore the imperative to find a solution) more costly for the FFL than for the players. The issue of time is included by providing for multiple bargaining sessions, each of which becomes more costly to utilise.

**Teams**

Students need to be allocated to an even number of teams, consisting ideally of four to six participants. Half of these teams will play the role of the ‘Federal Football League (FFL) Management Committee’ with the other half acting for the ‘National Association of Professional Footballers (NAPF) Bargaining Committee’. These negotiation teams should be formed one or two classes before the use of the simulation to ensure team members have sufficient time to meet and
develop their bargaining strategies. This is usually undertaken outside of class time, however a short period in the class preceding the first bargaining round may also be set aside for this purpose.

**Information**

Once the teams are formed, participants are given two documents which set out the context of each bargaining round and information known to each of the parties. These are the:

1. **Scenario Background;** and the
2. **FFL Management Committee – Confidential Team Information; or NAPF Bargaining Committee – Confidential Team Information.**

The **Scenario Background** document is common to both negotiating teams and provides students with the context of the negotiations between the FFL and the NAPF. This scenario also provides instructors with material for extension and analysis at length in subsequent classes (along with the suggested issues as set out below). The core bargaining issues are also included in this document.

The **FFL and NAPF Confidential Team Information** documents provide the negotiating teams with further information regarding the relative importance of the bargaining issues identified in the **Scenario Background**, along with the points schedule for achieving various outcomes. Given that the objective of the simulation is for each negotiating team to maximise their points score, it is essential that teams do not reveal this schedule to the other. Instructors should familiarise themselves with the **Scenario Background** and both **Confidential Team Information** documents prior to the commencement of the simulation. This will allow the instructor to effectively answer student questions and, where necessary, modify the rules ‘on the run’ to ensure a more effective simulation.

To repeat, it is imperative that students maintain the confidentiality of the information provided to them to ensure that both sides have imperfect information relating to the objectives and preferences of their ‘opponents’.

**Sequencing of Classes**

Classes may be sequenced in several ways, depending upon time constraints and the relative importance of various facets of the simulation to individual subject objectives and content. Ideally, students will be exposed to core concepts such as the nature of collective bargaining; the structure and purpose of (sports) labour and product market controls and practical negotiation techniques before the simulation. This allows the instructor to introduce the fundamentals of successful bargaining and negotiation and to particularly identify several important features of any bargaining scenario:

- The tactical aspects of bargaining and the need for planning and preemption of the other parties’ preferences and possible strategies;
• The costs and benefits associated with delaying tactics in the bargaining process; and

• The importance of developing long-term relationships between management and their employees (in this case, the players).

Alternatively, if students have sufficient general knowledge of the issues on the ‘bargaining table’, and/or previous instruction or experience in negotiation, the first round may be used as an ‘ice breaker’ or introductory class to stimulate student interest early in the semester. This is followed by further instruction on the issues raised in the simulation over the rest of the semester.

Irrespective of the approach, it is advised that instructors follow-up the bargaining round with a class discussion. Such classes should be scheduled to discuss the bargained outcomes and to relate the conceptual foundations of the simulation and the subject to the participants’ experiences in the simulation. Key issues in the scenario and the strategies adopted by both teams can thus be evaluated for the purposes of a course in sports management, game theory and applied microeconomics, or advocacy and negotiation skills.

One danger with simulation is that students will (rationally) form strategies and opinions based upon the payoff (i.e. the points schedule) and design of the rules of the simulation. Inevitably, such exercises can only provide a ‘working guide’ to bargaining in practice, for they necessarily simplify reality and abridge the time frame of the negotiation process. It is therefore important to emphasise the desired learning outcomes and, where necessary, explain the difference between simulation and practice after the simulation is completed. This discussion may occur immediately after the conclusion of bargaining and should be revisited at the beginning of the next class.

**The Bargaining Rounds**

As mentioned, students are allocated to teams several classes before bargaining takes place and should be encouraged to discuss their negotiating strategies prior to the bargaining session. Instructors may, however, find it useful to allow a little time in class for a final private conference before the commencement of the bargaining periods. An additional vacant room is ideal for this purpose if available. The simulation itself is designed to be completed within 120 minutes (i.e. two standard lectures or tutorials). This allows 20 minutes for final comments, student questions, plus any last-minute conferences by each team; three 20 minute bargaining periods, three 5 minute ‘time outs’ between each period, and 30 minutes for a short evaluation of the exercise within a two hours. Time outs may also be awarded within a bargaining period at the discretion of the instructor, to allow further private conference and the revision of bargaining strategies ‘in the heat of the moment’. Instructors may wish to change the length of the negotiation sessions and/or eliminate the compulsory time outs, but should note that the 20 minute breaks between bargaining periods represent important timing markers which influence the points awarded to both the FFL and the NAPF negotiating teams. Instructors must therefore keep a close watch on the time.
Outcomes

A Pareto optimal outcome (where joint outcomes are maximised and any alternative will result in the worsening of the points outcome for one of the parties) is possible in both rounds of bargaining. The Pareto optimal results are as follows:

- A three year CBA;
- No player draft;
- FFL control over the choice of player footwear; and
- Two alternatives for the optimal minimum salary and qualification level for salary cap exemption as a ‘marquee player’ ($72,000 and 80 games or $73,000 and 83 games).

These terms and conditions equate to a Pareto optimal combined score of 960 points (FFL, 580; NAPF, 380) and when the bonus points for timing issues and partial agreement are included, the optimal score will be 1200 points (FFL, 620; NAPF, 580) if the CBA is finalised in the second 20 minute bargaining period. Instructors may obtain a copy of the Excel spreadsheets from the authors if interested in examining the range of possible bargaining outcomes.

SPORTS MANAGEMENT APPLICATIONS

League Structures, Collective Bargaining and Industrial Conflict

Sporting leagues are highly complex organisations with distinct economic (and legal) characteristics. To economists, leagues may represent a single economic or business entity (Davidson, 1994; Goldman, 1989; Mason, 1997) or a series of separate firms engaging in some form of joint undertaking akin to a business cartel (e.g. Scully, 1995). Yet analysis of the production process which represents one feature of the ‘peculiar economics of professional sports’ (Neale, 1964) suggests that a sporting league is arguably different again, located (as is the cartel) in the hybrid category of Williamson’s typology of economic organisations (see e.g. Williamson, 1996).

A common feature of well established professional sporting leagues in Australia and around the world is a history of collective bargaining between the league (and / or clubs) and the collective representatives of the athletes. This history has been one of continual change and development of the regulations governing league-club-player relations in both the labour market and the product market (Schwab, 1998). Instructors should thus introduce students to the ‘peculiar economics’ and two areas of strategic interest to both sporting leagues and player associations (unions), namely:

- monopsonistic regulations restricting the range of both employment opportunities in the labour market for professional athletes and individual salary levels (labour market controls); and
• arrangements governing the distribution of revenues from key sources such as ticket sales, the sale of broadcasting and other proprietary rights, sponsorship and endorsement arrangements and merchandising sales (product market controls).

The issues ‘on the bargaining table’ in this simulation reflect these strategic realities and provide an opportunity for instructors to introduce and/or review a range of contemporary ‘management and player issues’ (Schwab, 1998) in the interrelated fields of strategic management, sports law and industrial relations, sports economics, human resource management and sports marketing.

The formation of league structures and policies to effectively promote ‘competitive balance’ or ‘a relatively high degree of evenness under stable financial conditions’ (Victorian Football League (VFL) Commission, 1985, p.vii) have been argued as critical to the performance of a sporting league (e.g. AFL, 1994; Stewart & Smith, 1999; VFL Commission, 1985). As suggested above, two available policy options which may influence this key performance objective are regulation of the league’s labour and product markets. A substantial body of literature deals with the economics and/or law of labour market controls for professional athletes. Labour market controls introduced in this simulation include the player recruitment draft and systems of salary capping. Many of the references included in the sports management section of the bibliography provide empirical examples, economic theory and/or legal analysis to provide the basis for introductory or follow-up classes on this topic. The intended effects of product market regulations implemented by leagues are twofold: (a) to distribute revenues from key revenue streams; and (b) to equalise club costs. These matters are predominantly dealt with in a theoretical manner in the literature (e.g. Atkinson, Stanley & Tschirhart, 1988; Fort & Quirk, 1995), although the Australian Football League has compiled several useful reports which examine the practical outcomes of such systems (AFL, 1994, 1998; 1999; VFL Commission, 1985).

These issues should be familiar to any instructor or student with an interest in professional team sports. Instructors can therefore build upon this knowledge and the issues in the simulation as the platform for discussion of the choice of labour and product market regulations in a ‘first-best’ environment, and constraining features, such as the legal environment, which limit the ability of leagues to implement these choices in reality.

If empirical data is available for a league, follow-on or applied classes can evaluate the effectiveness of such regulations. Instructors should particularly consider the effect of league structures and collective bargaining agreements upon the state of relations between leagues and clubs on one hand and players, unions and player agents on the other. Staudohar (1988; 1990; 1996; 1997; 1999) and Jennings (1990; 1997) provide valuable analysis of the strikes and lockouts which have accompanied collective bargaining in North American professional sports in the past 15 years. These examples can be used to identify relevant issues in the simulation scenario and the Australia experience.
Market Competition

The economic conditions and reasoning underlying the formation and success of rival sporting leagues are also important issues for class analysis. While individuals aligned to the ‘traditional’ league in a sport generally treat rival leagues as ‘destroyers of the code’, the existence of rival leagues is merely an example of market competition emerging to challenge entrenched monopoly leagues. Ross (1989, 1991) and Fort & Quirk (1997) offer an economic treatment of this issue, while Quirk & Fort (1992, 1999) provide an excellent and more readable background to the history of rival leagues in the US major leagues. Instructors interested in the Australian position should note the similarities between the development of the Victorian Football League in the 1890s, the New South Wales Rugby League in the early 1900s, World Series Cricket in the 1970s and Super League in the 1990s.

Given the path dependence of the structural forms which have emerged in ‘traditional’ leagues, rival leagues represent a rare opportunity for sport managers to explicitly choose the configuration of the structural relationships binding together the league administration, the clubs, athletes, players’ association and other key stakeholders of a sporting league. Instructors will find it valuable to compare the structures and geographic bases of rival and pre-existing leagues to emphasise this point and understand the dynamics of such market competition.

Legal Issues

The common law doctrine of unreasonable restraint of trade, antitrust law and competition policy have all had an immense impact upon the regulatory structures adopted by professional sporting leagues. Depending upon the course objectives, instructors may raise this body of law in class to develop an understanding of how (in particular) the restrictive labor market controls of Australian sporting leagues have been consistently defeated by the courts over the past 30 years. Given the centrality of labour market regulation to the well-being of sporting leagues, this material provides an excellent example of the relationship between an organisation and its operating environment, and resultant strategies of key stakeholders with conflicting objectives to those of the sporting league administration.

Sports Marketing

Finally, collective bargaining agreements are increasingly dealing with issues of intellectual property and the marketing and endorsement rights of athletes, clubs and leagues. There is only an indirect

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discussion of this vital issue in the simulation (the rights of the athletes to wear football boots of their own choosing). However, the effects of changes to the ownership of intellectual property rights upon the ability of leagues, clubs, players and stadiums to earn broadcasting, licensing and endorsement revenue is a current ‘hot topic’ in sports management, law and marketing. Sutton and Parrett (1992) and Mason (1999) provide excellent overviews of the general nature of the marketing issues in professional sporting leagues, while specific Australian examples can be found in Macdonald & Tripodi (1999; 2001) and Shilbury, Quick & Westerbeek (1998).

BARGAINING AND NEGOTIATION APPLICATIONS

Beyond these specific sports management and player issues, the simulation provides a springboard for the instructor to provide some context to the textbook accounts of bargaining and negotiation processes. There are four aspects which are, in our own experience, worth exploring.

First, there is the inevitable difference between ideal-type bargaining process and reality. To the student, the general outline of bargaining which textbooks must provide suggests that the whole process is cut and dried and occurs in an ordered manner. Consider, for example, the stylised account of the bargaining process presented in Gulliver’s (1979) developmental model (see Figure 1) which characterises bargaining as a sequential process.

**Figure 1.**

_Gulliver’s (1979) developmental model of negotiation._

- Disagreement in ongoing social life
  - Crisis precipitates dispute.
  1. Search for arena.
  2. Agenda definition.
  3. Exploring the field (emphasis on differences).
  4. Narrowing differences (emphasis on tolerable agreement).
  5. Preliminaries to final bargaining.
  6. Final bargaining.
  7. Ritualization of outcome.
  8. Execution of outcome.

Source: Adapted from Gulliver (1979).
There are many variations on this step-wise process of bargaining outlined by Gulliver. Yet, as Gulliver recognises, ‘real-life’ bargaining processes rarely, if ever, follow such an ordered process or necessarily include all those steps outlined. This is not to suggest these textbook accounts are not useful. But they must be placed in the context of what happens in practice and the dynamic manner in which procedural rules are themselves developed and renegotiated by the parties. In real life contexts, everything, including the rules of the game, are open to a negotiation process (Elster, 1989). It is this aspect of textbook accounts of the bargaining process that students generally find most dissatisfying and gives rise to the view that theory is a poorer reflection of real life complexity than is in fact the case. The reality is that our knowledge and theories of bargaining remains relatively unsophisticated. However, experience suggests that students are likely to find the simulation a stimulating introduction to these concepts.

The second issue directly flows from this point. This concerns the types of strategies and tactics potentially available to negotiators and the conditions under which they have, in either experimental or field research, been found to be most effective. There is now an extensive literature dealing with these aspects of bargaining. Space limitations constrain a full discussion here, and we recommend instructors consult one or more of the references listed in the bibliography below. It is worth noting, however, two classic references which provide a mandatory starting point, Schelling’s (1960) *The Strategy of Conflict* (particularly chapter 2) and Walton and McKersie’s (1965) *A Behavioral Theory of Labor Negotiations*. Students should thus be encouraged to appreciate the theoretical treatment of the bargaining and negotiation process as providing tools for analysing their negotiating techniques and improving their performance in future bargaining situations.

The third issue worth exploring, which is rarely accounted for in negotiation texts – and to the extent that it is, it is generally dealt with in a cursory manner – is the complex issue of multi-party and intra-organisational bargaining. Generally, theoretical accounts of bargaining assume that a bargaining committee behaves as a single agent which knows its own mind. This issue was first recognised by Walton and McKersie in their classic 1965 work. Unfortunately, it was not possible to incorporate this factor into the simulation; rather we have chosen to specify the goals and preferences of each side in the schedules of points for the FFL and the NAPF (although there will inevitably be conflict between team members over the appropriate bargaining tactics).

It is, however, worth examining this issue in class discussion to draw attention to problems associated with defining interests in the first place as most organisations generally experience difficulty in reconciling differences between the various groups of which they are comprised. Consider the hypothetical NAPF. Potentially, we can identify at least three groups of players with very different interests: the superstars, the rookies, and the veterans in the final years of their careers. The superstars will expect the NAPF to relax restrictions on the salary cap and allow players to negotiate their own sponsorship deals with boot makers. Rookies will instead favour the NAPF to push for a
higher minimum annual player salary. Veterans, in contrast, may look to things such as limits on the capacity of clubs to use performance-based pay systems and seek the introduction of superannuation funds and counselling/welfare schemes to help players make the transition to their post-football life (although these issues are not present in this simulation). Such differences mean the NAPF must define its own interests and priorities well before any negotiation with the FFL can take place. The FFL will be similarly faced with a diversity of interests as expressed by the League’s management team, the League owners and the management of the eight FFL Clubs. The reconciliation of these interests will determine the bargaining preferences of the FFL Management Committee. Both of these, in turn, will influence the bargaining agenda, which is then subject to negotiation and redefinition once bargaining has commenced. Again, the need for relative simplicity means questions of preference formation and agenda setting are not incorporated into this simulation.

A final issue worthy of class discussion also relates to the issue of defining interests, and concerns the assumptions we make about the motivations of the parties. Theoretical models – and this simulation – assume that bargaining behaviour is consistently rational in that the parties seek to maximise some clearly defined set of preferences. This is embodied in the schedules of points for both teams in the simulation. Yet a great deal of empirical work suggests two important aspects are not accounted for in this assumption (see Bazerman & Neale, 1991). First, the parties to negotiation do not necessarily behave in a perfectly rational manner. As much industrial relations and economic research has found, norms of fairness and acceptable behaviour influence the tactics and goals of the parties making pure rational strategies unlikely. There are also a range of cognitive limits which imply that strategies are more likely to be consistent with the assumption of ‘satisficing behaviour’ rather than rational maximisation. Second, agents usually negotiate from a ‘frame of reference’, which consists of assumptions about the motivations of their opponents and their relative position in the bargaining relationship. These frames engender attitudes of antagonism or cooperation, trust or aversion to commitment and, ultimately, a distributive (win-lose) or integrative (win-win) approach to bargaining (Fisher & Ury, 1981, Walton, Cutcher-Gershenfeld & McKersie, 1994).

MICROECONOMICS AND GAME THEORY APPLICATIONS

An important aspect of the negotiation process is its strategic nature; that is, the parties to negotiation must make decisions based on an expectation about the beliefs and preferences of other parties to negotiation. The study of these strategic aspects is the province of game theory and the microeconomics of bargaining. To explore this aspect, we shall briefly outline three basic games and their relevance to bargaining. Instructors and students are directed to a number of non-technical primers on game theory and the economics of bargaining in the bibliography below.

The first game is a standard ‘prisoners dilemma’ game applied to the process of wage negotiation. Here, two prisoners accused of murder are provided with the opportunity of confessing or not confessing to the crime, but without communication or knowing what the other prisoner has decided.
to do. They are both told that should one of them confess, but the other does not, one will get a reward (say, a commuted sentence), while the other will be punished with a longer gaol sentence (say, 30 years); if both confess, they will each receive a light punishment (say, 15 years each); and if neither confesses they will receive a minimal sentence (say, 1 year each). This thus produces four possible outcomes (prison sentences):

1. Prisoner 1 confesses, prisoner 2 confesses (15 years each);
2. Prisoner 1 confesses, prisoner 2 does not confess (0, 30 years);
3. Prisoner 1 does not confess, prisoner 2 confesses (30, 0 years); or
4. Prisoner 1 does not confess, prisoner 2 does not confess (1 year each).

The key feature of this game is the inability of either party to co-operate or, if it were possible, to enforce any contractual commitment made during negotiations. The optimal strategy for both players is to confess to the crime, although both players would obviously be better off had they both not confessed. For either prisoner to take the ‘not confess’ option would imply the other prisoner’s best strategy is to confess to the crime and thus benefit from the commuted sentence. In this case, individually rational responses result in everybody being worse off.

Within a negotiation context, this game has been applied to a range of characteristics of bargaining. For example it has been used to show how non-cooperative strategies in bargaining, which given the context of the situation appear rational of players individually, in fact produce outcomes that make both parties worse off. The Prisoner’s Dilemma game is perhaps more interesting from a bargaining perspective when it is considered in a situation of repeated interactions (or repeated bargaining rounds). Axelrod (1984) among others has shown that, in this case, it pays to attempt to foster a more cooperative solution even though no formal enforcement mechanism may exist. Axelrod further shows that in a situation of repeated interaction, the best strategy tends to be ‘tit-for-tat’; that is, cooperate in the first interaction, and should the other party not cooperate, behave in kind in future bargaining rounds. This has, for example, been used to show the importance of trust in the formation of collective agreements, and to explain why in some situations cooperative arrangements are unstable, despite the obvious benefits to all parties of seeking such arrangements.

The second game is one that highlights the role of uncertainty and informational problems in a strategic situation. In this case, there is uncertainty about the future state of the world in which the parties find themselves, yet current decisions require them to develop some expectations about what is likely. Consider a case in which a firm is engaged in its annual wage negotiation with its employees and is faced with a demand for a guarantee for no job losses over the next 5 years or a larger wage claim in the present period. Here, the firm is faced with choice of a long-term commitment or a more flexible employment system. Yet it cannot know with certainty that demand
for its products will be sustained or will fall. (For brevity, we refer to these two states as good and bad states of the world, respectively). Faced with uncertainty the employer must form some expectation, captured by the parameter $p$ $(1-p)$ that the good (bad) state of the world will in fact eventuate.

Again, there are four possible outcomes (expected payoffs) in this game:

1. The employer accepts a long-term commitment (C), and demand is sustained (GC).
2. The employer makes a long-term commitment (C), but demand falls (BC);
3. The employer opts for a flexible workforce (F) and demand falls (BF); and
4. The employer opts for a flexible workforce (F), but demand is sustained (BC).

In this game the employers expected ‘pay-offs’ for each outcome are a little more difficult to assign to each outcome because we are faced with a number of variables. In this case, the firm’s best decision is not clear-cut and will depend on how much confidence it has in a certain outcome actually occurring, and to what extent a mis-match between its employment strategy and the state of the world adversely affects profits. The employer’s choices are represented diagrammatically in Figure 2(a).

A similar game can be used to analyse a union’s decision to go out on strike when it is faced with incomplete information about a firm’s profitability (Figure 2(b)). In this case it does not have good information regarding the firm’s claims that it is unable to meet their wage demands because it has a less profitable business than believed by the union. In effect, the union does not know for certain that it faces a high profit or low-profit scenario (indicated by the dotted line between two possible nodes in the game tree in Figure 2(b)). Here, the union must weigh the potential benefits associated with taking a risk that a firm’s profit level can sustain its wage demand, against the potential cost that strike action may cripple a firm unable to afford the wage increase demanded. It must also weigh up the risk that, in not taking strike action, it may fail to gain a wage increase for its members that the firm could well afford. This captures an important strategic dilemma faced by bargainers where incomplete information and uncertainty are norm rather than the exception.

When presented in a non-technical, intuitive manner, we suggest these three games will serve to enrich both the process of preparation for the negotiation simulation and post-simulation class discussion. There are also a range of other games which capture various aspects of the simulation.

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2 Formally, we can say that the employer will choose a commitment strategy when the net benefits associated with a good state of the world is greater than in the bad state of the world. Using the notation of Figure 2a this can be expressed as: $p \cdot (V(GC) - V(GF)) > (1-p) \cdot (V(BF) - V(BC))$ - where $V$ is the value (profit level) associated with each of the four outcomes.
Wage bargaining games with uncertainty and information asymmetries.

2(a). Uncertainty About Future Demand 2(b). Informational Asymmetry About Profitability


presented (see references in the bibliography below) and make this simulation a useful exercise or application in a micro-economic course on game theory.

CURRENT INDUSTRIAL RELATIONS DEBATES

It is worth making some final comment on the efficacy of bargaining as opposed to some alternative dispute resolution mechanism. Within current Australian debates, enterprise bargaining has been lauded as the best means by which parties resolve disputes. The value of negotiated outcomes, it is often argued, is that they result in tailor-made solutions over which the parties accept ownership and responsibility for its success (see Niland, 1984). Yet bargaining theory and experience shows that impasse in negotiation is common. This raises two points of discussion, which are critical to understanding bargaining processes. The first concerns the question of identifying the conditions under which an impasse is more likely and the second concerns the role of alternative dispute resolution mechanisms.

To examine the first issue, economists have used the concept of a ‘contract zone’ to consider the feasibility of the parties finding a negotiated solution. Put simply, the contract zone defines the range of outcomes acceptable to both sides of the bargaining table. Common sense suggest a relationship similar to that depicted in Figure 3(a), where the probability of a negotiated outcome increases with the size of the contract zone. The intuition being that the larger the contract zone the easier it is to locate and thus reach agreement. However, there are both theoretical reasons and empirical evidence
to suggest that the relationship will be monotonic, as depicted in Figure 3(b). In this case the probability of reaching a settlement first increases with the size of the contract zone, but then falls as the contract zone becomes unusually large. This is so because on the one hand, increasing the size of the contract zone makes a settlement easier to locate. But on the other hand, a larger contract zone implies that the parties have more to gain from a strategy of maintaining an initial bargaining position, thereby increasing the likelihood of an impasse in bargaining (see Bloom & Cavanagh, 1987; Bruce & Carby-Hall, 1991).

There are, of course, a range of alternatives to resolve an impasse in bargaining, most notably courts, conciliation (mediation) and arbitration tribunals. Even here, mediators and tribunals have a wide array of possible procedural mechanisms available which can be used to resolve a negotiation deadlock, each of which has its own advantages and disadvantages. In the case of arbitration, it is common to distinguish between judicial, final offer and pendulum arbitration. These types have, to varying degrees, been associated with so-called ‘chilling’ and ‘narcotic’ effects on bargaining processes which precede them (for this view, see Niland, 1984). Again, it is not possible to deal with these in any detail, but they do form an important element of negotiations and can be examined further in class discussion as a natural extension of this simulation.

Figure 3.

Size of the contract zone and the probability of a negotiated solution.

![Figure 3](image-url)
BIBLIOGRAPHY

These suggested texts provide the basis for an examination of the underlying principles introduced in the scenario and teaching notes and extend the topics introduced above. We have categorised these materials under three general headings: (a) sports management; (b) bargaining and negotiation; and (c) game theory and micro-economic applications, although there is considerable overlap between the categories.

Sports Management


**Case Law and Legislation**


Adamson v West Perth Football Club Inc and Ors (1979) 27 ALR 475.


Buckley v Tutty (1971) 125 CLR 353.

Eastham v Newcastle United Football Club Ltd [1964] Ch 413.


Hall v Victorian Football League [1982] VR 64.


News Ltd v Australian Rugby Football League Ltd and Ors (1996) 135 ALR 33.

Nordenfeldt v Maxim Nordenfelt Guns and Ammunition Co Ltd [1894] AC 535.


**Bargaining and Negotiation**


**Game Theory and Microeconomic Applications**


COLLECTIVE BARGAINING SIMULATION: THE FEDERAL FOOTBALL LEAGUE – NATIONAL ASSOCIATION OF PROFESSIONAL FOOTBALLERS

Introduction for Students

This simulation is based upon the negotiation of a collective bargaining agreement (CBA) between a fictitious football league and union representing players in the league. Your instructor should have formed two teams, one to represent the Federal Football League (FFL) and the other representing the National Association of Professional Footballers (NAPF). The objective for each team is to maximise the number of points gained by negotiating the terms and conditions of the CBA between the FFL and the NAPF.

Both teams are provided with two documents. The document entitled ‘Scenario Background’ is common to both negotiating teams and provides information relating to the history of the FFL and the issues being negotiated in the collective bargaining process. However, the second document ‘Confidential Team Information’ is unique to each team. This document contains additional for each team as well as a schedule of points. These points are awarded depending upon the conditions in the CBA agreed upon by both teams. For the integrity of the game the schedule of points should not be revealed to the other team.

Scenario Background

The Federal Football League (FFL) was formed in March 1997, after the Player Rules and Standard Playing Contract of the Australian Football League (AFL) were challenged and defeated in the Victorian Supreme Court in February of the same year. Ex-Fitzroy Football Club player Mike Prentice was drafted by new AFL Club, the Brisbane Lions, under the special rules dealing with the Brisbane Bears – Fitzroy FC merger. Prentice took the AFL to court after expressing a reluctance to relocate to Brisbane, as he wished to remain in Melbourne with his family and to play football for a Melbourne-based AFL Club.

In a unanimous judgement of the Appeals Division of the Victorian Supreme Court, McAvaney, Roberts and Commetti JJ found key components of the AFL’s Player Rules and Standard Playing Contract to be void as an unreasonable restraint of trade. The Court’s ruling overturned the AFL draft as being an unreasonable restraint of trade and held clause 11.2 of the AFL Standard Playing Contract, in which the player agreed to be bound by a clause the AFL Player Rules (including the draft), to be void. In an extraordinary extension of the doctrine of unconscionability, the Justices also voided the severability clause of the Standard Playing Contract, and sought to “redress the imbalances of an employment relationship where the athlete is confronted by a monolithic employer”, by providing AFL players with the option of walking away from their existing AFL Club contracts without penalty beyond the repayment of wages for service yet rendered. The effect of this finding was to provide players with a short-term window of free agency.
The Prentice judgement also provided the international media & entertainment group Games Corporation with the opportunity to acquire the services of leading AFL players and form the ‘Champions League’, as a rival to the AFL in the Australian sports-entertainment market. Eventually launched as the Federal Football League, the FFL provided Games Corp with a prime sporting product for its developing pay-TV network.

The FFL comprises 8 teams, with two Melbourne based Clubs and one Club located in each of Adelaide, Brisbane, Canberra, Hobart, Perth and Sydney. Each FFL Club employs 32 players, with FFL matches having four 20 minute quarters, with 15 players on the field and an unlimited interchange bench of the maximum 32 players. The FFL plays a three game exhibition series and a 21 game regular season. One game is played each Friday night, Saturday afternoon, Saturday night and Sunday afternoon during the regular season. The finals series is played over three weeks, with the Grand Final played on the third Friday night of September. Friday night games and the finals series are televised free-to-air with a one hour delay on the National Nine Network and all games are televised live on the GameSport pay-TV network.

With a host of the elite Australian footballers playing in the FFL, support for the new league has been strong with match attendance averaging 35,000 for the first two FFL seasons (1997 and 1998) as well as strong free-to-air TV ratings and increased subscriptions to the GameSport channel. The strong interest in a premium sports product have led to much speculation by market analysts regarding the signing of a new free-to-air TV contract. Such an eventuality would dramatically improve the profitability of the FFL.

All FFL clubs are majority-owned by Games Corp., and all the players in the league employed by Games Corp. and placed with the clubs on labour-hire contracts. The Federal Football League thus represents the first fully professional sporting league in Australia to adopt the single entity league (SEL) concept. The labour market regulations implemented in the FFL provided for a one-off player draft to initially allocate the players lured from the AFL and other minor leagues to the eight FFL teams. These players were then contracted to the clubs via a series of varying length labour-hire contracts (of a minimum of 2 years) between the player, the club and their initial employer, Games Corp. After this initial allocation of playing talent, a player transfer system has been unnecessary due to the 2 year minimum term of the labour-hire contracts. However, with many players due for a new contract for the 1999 season, FFL management has publically acknowledged the possibility of introducing of a player draft. A draft would regulate the entrance of new players to the league and counter the possibility of competitive imbalances caused by players seeking to transfer between clubs now they are ‘out of contract’. Anticipating that this will lead to salary inflation, the FFL is also investigating the introduction of a salary cap on player wages. Legal advisors have questioned the validity of a single-economic-entity defence to any legal challenge to the structure and employment contracts of the FFL. This defence has hitherto been unsuccessful in Australian restraint of trade
cases, although the strength of the FFL’s structure and player transfer rules is further buttressed by the single employer status of Games Corporation.

The Collective Bargaining Agreement (CBA) is being negotiated between the FFL (which is owned by Games Corp.) and the National Association of Professional Footballers (NAPF), the players’ association formed to represent FFL players. The NAPF was formed with the support of FFL management in early 1998 and has rapidly achieved a 100% membership rate. This CBA is the first such management-labour agreement in the short history of the league. It represents the first opportunity for the NAPF to take a strong stance in support of the collective interests of players and player welfare in the FFL.

**Bargaining Issues**

The initial round of discussions between the FFL Management Committee and the bargaining committee of the NAPF identified five (5) key issues for negotiation in the formation of the CBA:

1. The LENGTH OF THE AGREEMENT.

2. The introduction of a PLAYER DRAFT.

3. The right of individual players to CHOOSE THEIR OWN FOOTBALL BOOTS.

4. (a) Introduction of a SALARY CAP on club player wage expenditures; and (b) The required number of games played for a player to qualify for a ‘MARQUEE PLAYER’ EXEMPTION from the salary cap, where 50% of that player’s salary is excluded from salary cap calculations.

5. The level of MINIMUM ANNUAL SALARY.

Further discussions have seen both parties on the need for a salary cap, which has been set at $3.5 million. These negotiations were leaked to the media and there is now a high degree of public awareness of the discussions, with prominent media commentators suggesting the commencement of the new football season is under threat unless a collective agreement can be reaching in the near future.

In order to reach an agreement over the issues listed above, three negotiation sessions have been scheduled, after which the parties have agreed that unresolved issues will be referred to a private commercial arbitrator. Although they have agreed to the inclusion of an arbitrator in the bargaining structure, both parties have expressed concerns about this eventuality. Neither party wishes for this to occur given the uncertainty of an arbitrated outcome to the satisfaction of both parties.
Federal Football League Management Committee

Confidential Team Information

Games Corp projections envisage further growth in broadcasting revenue streams in the next 5 years. Games Corp executives have therefore advised the FFL Management Committee of the desirability of locking the NAPF into a longer collective agreement, to minimise player salary costs in the medium-term. It is similarly desirable to contain the level of the minimum salary, although budget projections and Club General Managers (who are keen to have room under the salary cap to entice big-name players) all suggest that minimum rates up to $62,000 may be acceptable. Club General Managers and the FFL Football Operations Manager also advise that players should not be able to qualify for exemptions for ‘marquee player’ half-salary exemptions from the salary cap without a substantial degree of experience (i.e., 4 or 5 years).

Although players were initially distributed evenly by the Establishment Draft, the FFL Football Operations Manager has been concerned by possible longer-term imbalances in the on-field competitiveness of the FFL Clubs. This is especially worrisome when comparing the franchises located in small population centres such as Canberra and Hobart which have stadiums of only 30,000 seats to the Clubs playing at the Melbourne Cricket Ground and Stadium Australia, with both stadiums having an 80,000+ seating capacity. This dramatically affects the earnings capacity of FFL Clubs, potentially giving the Clubs in the larger markets the competitive advantage of greater financial reserves, which over time will affect the on-field evenness of the FFL. As a result of these concerns, The FFL Football Operations Manager has strongly recommended the introduction of a player draft to the FFL Management Committee to regulate the entrance of new players to the league.

The FFL Marketing Department is also envisaging substantial future growth in the value of sponsorship, licensed apparel and merchandise. A major sports apparel company has expressed interest in an exclusive licensed apparel agreement with the FFL. In order to maximise the value of such a deal, the Marketing Department has highlighted the need to maintain control of the FFL’s intellectual property rights including control of the brand of footwear worn by FFL players.

Federal Football League Points Schedule

Length of the agreement

Depending upon the length of the agreement you will receive the following points:

1 years ➔ -100 points

2 years ➔  200 points

3 years ➔  300 points
4 years ➔ 400 points

Player Draft

If you are able to introduce a player draft you gain 100 points. If a draft is not introduced, you lose 50 points.

Choice of Football Boots

If the NAPF wins the right for players to choose their own footwear you lose 150 points. If this right is not conceded you gain 100 points.

Partial Agreement

- If you are able to get the NAPF to agree to the terms of a CBA covering all five issues within the first two negotiation sessions, you gain 40 bonus points.
- If you still have unresolved issues at the commencement of the third bargaining session you lose 10 points per minute.
- If the dispute remains unresolved at the end of the third negotiation session the remaining issues are referred to the private arbitrator for a ruling on the unresolved issues.

Lock Out

The League media department advises you that if you choose to lockout the players, the public image of the FFL will be seriously damaged (-400 points) and that under the terms of the arbitration agreement, the NAPF would immediately refer the dispute to arbitration. This would result in the arbitrator handing down a ruling covering all five (5) bargaining issues.

Arbitration

Your legal advice suggests the private arbitrator will form their ruling based upon several ‘precedents’ involving federal award applications covering the Australian Football League (AFL), Australian Rugby League (ARL) and the National Soccer League (NSL). Your legal advisors also suggest that the arbitrator would resolve the issue along the following conditions:

1. the CBA to be reviewed after three years;
2. the introduction of a player draft with players eligible for free agency at the age of 26 or after six (6) consecutive seasons with one (1) club;
3. a minimum annual salary of $70,000;
4. a requirement of playing 100 games for eligibility under the ‘marquee player’ salary cap exemption; and

5. players to have the right to wear the football boots of their own choosing.

(NB: calculate points from the information in this confidential document)

**Federal Football League Points Schedule:**

*Minimum Annual Player Salary*

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**Federal Football League Points Schedule:**

*Games required to Qualify for 'Marquee Player' Salary Cap Exemption*

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NATIONAL ASSOCIATION OF PROFESSIONAL FOOTBALLERS BARGAINING COMMITTEE

Confidential Team Information

The NAPF is very unhappy with the proposal of the FFL Management Committee to introduce a player draft, and does not wish to see any such restrictions upon freedom of NAPF members to play for the Club of their choice. Given the origins of the Federal Football League, the NAPF is confident that any player draft represents an unreasonable restraint of trade and would be defeated in court.

Many players have indicated to NAPF Club Representatives that they place a very high value on the right to choose their own brand of football boot rather than wearing the boot manufactured by the Club’s sponsor. Some players have expressed concern with the comfort level of their boots and the NAPF considers this to be an important issue of occupational health and safety. While this is a minor issue in the broader bargaining picture, it is an issue the executive of the NAPF intends to seriously pursue. Of prime importance, however, are the issues of the length of the agreement and the level of minimum wages. Documents leaked from the HQ of Games Corp. suggest that significant new revenue streams will be coming on line very soon, including major corporate sponsors and a possible US cable television deal. This will inevitably influence the capacity of the FFL to increase minimum annual player salaries and to raise the overall value salary cap. Thus, the NAPF does not wish to enter into a long-term agreement which would lock players into accepting wages which are artificially set below their true value as indicated by leaguewide revenues.

NATIONAL ASSOCIATION OF PROFESSIONAL FOOTBALLERS POINTS SCHEDULE

Length of the Agreement

Depending upon the length of the agreement you will receive the following points:

2 years  ➔  200 points

3 years  ➔  100 points

4 years  ➔  -100 points

5 years  ➔  -200 points

Player Draft

If the FFL is successful in introducing a player draft you lose 150 points. If a draft is not introduced, you gain 100 points.
Choice of Football Boots

If you win the right for players to choose their own footwear you gain 100 points. If this right is conceded you lose 50 points.

Partial Agreement

- If you are able to reach agreement on more than three issues you gain a bonus of 100 points.
- If you are able to get the FFL Management Committee to bargain for more than one negotiation session (i.e., avoid a lockout of players by the FFL Management Committee or delay the finalisation of the CBA to exert pressure on the League) you gain 100 bonus points.
- If, however, you still have unresolved issues by the end of the third negotiation session you lose 50 points.
- If the dispute remains unresolved after three negotiation sessions, the remaining issues are referred to the private arbitrator who is empowered to make a binding ruling on the unresolved issues.

Strike Action

You may use the threat of strike action, but this is likely to be interpreted by the FFL Management Committee as the end to any chance for a cooperative relationship and the formation of a CBA. However, if you do choose to go out on strike, your public relations advisors suggest that the cynical general public would regard this as another example of greed from individuals already earning more than most of the community. As a result you would lose considerable public support and therefore lose 150 points. Under the terms of the arbitration agreement, if you go out on strike the FFL Management Committee would immediately refer the dispute to the private arbitrator for a ruling on all five bargaining issues.

Arbitration

Your legal advice suggests the private arbitrator will form their ruling based upon several ‘precedents’ involving federal award applications covering the Australian Football League (AFL), Australian Rugby League (ARL) and the National Soccer League (NSL). Your legal advisors also suggest that the arbitrator would resolve the issue along the following conditions:

1. the CBA to be reviewed after three years;
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(NB: calculate points from the information in this confidential document)

**National Association of Professional Footballers Points Schedule:**

**Minimum Annual Player Salary**

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