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Department of Economics
Discussion Papers
ISSN 1441-5429

Labour Market Intervention, Revenue Sharing and Competitive Balance in the Victorian Football League/Australian Football League (VFL/AFL), 1897-1998

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No. 02/02

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LABOUR MARKET INTERVENTION, REVENUE SHARING AND COMPETITIVE BALANCE IN THE VICTORIAN FOOTBALL LEAGUE/AUSTRALIAN FOOTBALL LEAGUE (VFL/AFL), 1897-1998

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ABSTRACT

This paper summarises some key aspects of a recently completed PhD thesis in the Department by Booth (2000), entitled 'Labour Market Intervention, Revenue Sharing and Competitive Balance in the Victorian Football League/Australian Football League (VFL/AFL), 1897-1998'.

The thesis is a theoretical and empirical analysis of whether labour market devices and revenue sharing rules have been effective in equalising the distribution of playing talent between clubs, thereby enhancing competitive balance. The history of labour market intervention and revenue sharing in the VFL/AFL from the league's formation in 1897 is discussed, with six different periods between 1897 and 1998 being identified for analysis.

Fort and Quirk's (1995) model of US professional team sports leagues is chosen to analyse the effectiveness of the various devices that have been used in the VFL/AFL to improve competitive balance. But the model is first adapted to allow for VFL/AFL clubs being win maximisers (subject to a budget constraint) rather than profit maximisers. The various devices used by the VFL/AFL are assessed in terms of their likely impact on competitive balance, with some significantly different theoretical predictions than under profit maximisation. It was found that free agency

results in a less equal distribution of player talent under win maximisation, whilst both gate sharing and increases in shared league-revenue tend to equalise playing strengths (which is not the case under profit maximisation).

The conclusion reached is that a national player draft, a team salary cap and gate and league-revenue sharing is that combination most likely to succeed in achieving higher levels of competitive balance. The evidence of competitive balance over the history of the VFL/AFL is consistent with the predictions of the model.

JEL Classification: J44, L83, and N77

1 INTRODUCTION

As a teenager in northern Victoria in the 1960s, it was not uncommon for local Australian Rules footballers to be enticed to try their luck with a club in Melbourne in the Victorian Football League/Australian Football League (VFL/AFL).[1] In 1968 country zoning was introduced and local Murray League players were 'zoned' to the Geelong Football Club. According to

[1] The Victorian Football League (VFL) changed its name in 1989, and competed under the banner of the Australian Football League (AFL) for the first time in 1990.

football folklore, these devices were necessary to help even up the competition by preventing the wealthy VFL/AFL clubs from procuring the majority of the best 'country' players. In the mid to late 1980s the VFL/AFL replaced the widespread system of metropolitan and country zoning with a national player draft, and combined it with a team salary cap. The VFL/AFL suggested these new devices were necessary both to even up the competition and to ensure financial viability of the VFL/AFL clubs. Intuitively, I could understand the desire by the VFL/AFL to want to even up the competition, but not why it felt the need for both a national player draft and a team salary cap. I became interested in whether either or both of these devices had contributed to what I perceived as an 'evening-up of the competition' (an improvement in competitive balance) in the VFL/AFL.

Inevitably, in seeking to find the answer I was drawn to the US literature on the economics of professional team sports leagues, since the use of player drafts and team salary caps in the US preceded their use in Australia. In brief, the US literature concluded that the equalising effect on the distribution of player talent of player drafts would be undermined by cash sales of player talent. Furthermore, salary caps would improve competitive balance in principle, but were faced with obvious enforcement problems.

Moreover, the US literature generally assumed clubs were profit maximisers, which is clearly an inappropriate assumption in the context of member-owned VFL/AFL clubs.

It quickly became obvious that in order to pass judgement on the effectiveness of the draft and/or salary cap, theoretical and empirical comparisons needed to be made with earlier periods when other devices were used to try to achieve competitive balance. Hence, the thesis topic was expanded to consider all of the devices (including other types of labour market intervention and also gate and league-revenue sharing) that have been employed by the VFL/AFL between 1897 and 1998 to try to improve competitive balance.

2 HISTORY OF PLAYER AND REVENUE SHARING RULES[2]

One of the first tasks faced was to identify for analysis different periods of player (recruitment, transfer and payment) rules and (gate and league) revenue sharing rules in the VFL/AFL from 1897. The six periods chosen for analysis between 1897 and 1998 are identified depending on the various

[2] See Booth (1997) for an earlier version of this Chapter, which appeared in the *Australian Society for Sports History Bulletin.*

combinations of different labour market devices and revenue sharing rules that applied at the time. The labour market devices varied from no intervention at all (in which case players are complete 'free agents') to other devices such as metropolitan (geographical/territorial) zoning, maximum limits on an individual player's wage (the Coulter Law) and country (geographical) zoning. More recently, a team salary cap, a national player draft and a minimum wage have been used. Aside from these labour market devices, rules regarding the sharing of gate revenue and league-revenue have also been used to influence the ability of clubs to recruit and pay players.

Officially the VFL was an 'amateur' competition until 1911, though there was very strong suspicion of under-the-table payments being made. Period 1 (1897-1914) was one of strong competition for new players, hence my use of the term 'free agency'. Transfer rules applied to current players, but uncertainty remains as to how effectively these transfer rules were enforced and whether signing-on fees and/or transfer fees were common.

Period 2 (1915-1929) was one where each club was allocated a geographical zone of metropolitan Melbourne from which players could be recruited. However there was keen competition between VFL clubs for

country, interstate and VFA (Association) players. The period ended with the introduction of the Coulter Law.

Period 3 (1930-1944) was one of metropolitan zoning, with free agency for country and interstate players. Transfer fees and signing-on fees, though illegal, were not uncommon for country and interstate recruits. Employment was also a strong inducement. The Coulter Law, a uniform maximum imposed on each individual player's wage, was imposed in 1930. Despite this maximum wage being adjusted through the period, it became much more difficult to enforce with the passage of time.

The beginning of period 4 (1945-1967) has been defined by the introduction of a 'modified-form of gate sharing' in 1945. Television coverage began in 1957, the income from which was shared equally between the clubs. Metropolitan zoning and the Coulter Law remained the major labour market devices in use.

The new features of period 5 (1968-1984) included the addition of country zoning to complement metropolitan zoning, the transfer fee system and various schemes to control player payments. Country zoning was introduced for the 1968 season. In 1970, transfer fees, signing-on fees and

contracts were allowed for each club's two permissible interstate recruits. At the end of 1971, transfer payments were allowed for exchanges of players between VFL clubs. Player contracts became increasingly common and transfer fees were prevalent into the early 1980s. An interstate player draft was introduced in time for the 1982 season. Concern was raised over the validity of the VFL's zoning, transfer and player payment rules, which culminated in the courts declaring the regulations an unreasonable restraint of trade in the Foschini case in 1983.

The VFL Commission's appointment in 1984 heralded a new direction in policy for period 6 (1985-1998), beginning with the introduction of the team salary cap from 1985. Zoning was phased out during this period with country zoning ending in 1986 and metropolitan zoning in 1991. The first national player draft was held in time for the 1987 season, with drafted players initially being 'bound' for three years, later reduced to two years. Senior player lists were also introduced at this time. A minimum wage was introduced in 1994 as part of the first of a series of collective bargaining agreements (CBAs) between the AFL and the Australian Football League Players' Association (AFLPA). Recruiting concessions were given to new clubs (Brisbane, West Coast, Adelaide, Fremantle and Port Adelaide) to

help them form their player lists. In 1993, special draft concessions were given to the three bottom teams with competitive difficulties. From 1998, one priority selection prior to Round 1 of the national draft was given to any team that won less than 25% of its matches in the season.

3 LITERATURE REVIEW

The first question to consider is whether the objectives of VFL/AFL clubs are so different that it is inappropriate to use any of the conventional sports leagues models developed for the US. The nature of member-based clubs in the VFL/AFL, the research of Dabscheck (1973) and casual empiricism would all suggest that win maximisation (subject to breaking even) is a more appropriate approximation of the objective function of a VFL/AFL club than is profit maximisation. However, Fort and Quirk (1995) assume profit maximisation. In my view the analysis of the impact of labour market devices and gate and league-revenue sharing on competitive balance in the VFL/AFL benefits from a more detailed re-working of Fort and Quirk's (1995) two-team league profit maximising model, along the lines of Késenne's (1996) win maximisation approach.[3] This allows me to use economic theory to address the very question that Schwab (1998) suggests

remains unanswered. That is, to explain the effects that various devices (such as labour market regulation and revenue sharing schemes) have had on competitive balance in the VFL/AFL during each of the six periods between 1897 and 1998.

4 THE WIN-MAXIMISING MODEL

The section below provides a non-technical summary of the detailed theoretical predictions of Booth's (2000) win-maximising model of the effectiveness of the various individual labour market and revenue sharing devices that have been used by the VFL/AFL to improve competitive balance between 1897 and 1998.

4.1 FREE AGENCY UNDER WIN PERCENT MAXIMISATION

Compared with free agency under profit maximisation, free agency under win percent maximisation results in less equal playing strengths and higher unit costs of talent.

[3] My theoretical work was completed before becoming aware of Késenne (1996) in November 1999.

4.2 GEOGRAPHICAL ZONING

The effect of geographical zoning in achieving equal playing strengths depends initially on the ability of the league to create geographic zones comprising equal amounts of playing talent and the clubs to be equally adept at selecting talent. Notwithstanding this, whilst wage costs are likely to be lower under geographical zoning, depending on the particular wage level there may still be an incentive for the sale of player talent which (partially) undermines the initial effect of geographical zoning, unless the club is prepared to suffer a loss. But, even where the sale of talent occurs, more competitive balance is achieved with geographical zoning than under the win percent maximisation free agency outcome.

4.3 THE COULTER LAW (MAXIMUM WAGE)

Assuming all clubs adhere to the rule, a highly talented player already receiving the Coulter wage maximum has no incentive to change clubs in order to gain a higher wage. Over time though, as new players enter the VFL, the financial incentive to join strong clubs would be less and a more equitable distribution of talent could be expected. However, if a club pays above Coulter Law rates and the offer is not matched, a club could raise its own win percent at the expense of another club. If counter offers were

made, competitive bidding for the highly skilled talent would raise wage levels back to their pre-Coulter Law rates, making the Law ineffective.

4.4 NATIONAL PLAYER DRAFT

The conclusions here are similar to those under geographical zoning, in the same way that Fort and Quirk's (1995) conclusions on the reserve/option clause and the rookie draft in the US are similar. Over time, equality of playing strengths would be expected to emerge under a national player draft. But depending on wage levels, there may be circumstances where, in order for a weak team to avoid exceeding its budget constraint, the effects of the player draft could be (partially) undermined through cash sales of player talent (either legal or illegal). Whilst competitive balance will be reduced by these sales, the undermining effect will only be partial. That is, the equilibrium outcome under the player draft with cash sales will result in playing strengths more equal than under the win percent maximisation free agency outcome.

4.5 SALARY CAPS

In principle, assuming clubs adhere to the team salary cap, this device should ensure approximately equal playing strengths. However, if teams cheat, the end result of their competitive quest for player talent will be the win percent maximisation free agency outcome. A minimum team salary seems to have no role under win percent maximisation, the only effect might be to force a weak team into operating at a loss.

4.6 GATE REVENUE SHARING

Under win percent maximisation, gate sharing moves the league towards more competitive balance as the share of the home gate decreases. With 50-50 gate sharing in the two-team league model, if the only revenue were from the gate, equal win percents would be achieved, a result quite different from that under profit maximisation where gate sharing has no effect on the level of competitive balance, but lowers player salaries.

4.7 LEAGUE-REVENUE SHARING

Under win percent maximisation, a league that generates revenue that might otherwise be generated by individual clubs (such as league-

negotiated TV broadcast rights revenue) which is shared among the clubs will have a higher level of competitive balance than a league where clubs generate all their own revenue individually. Moreover, an increase in shared league-revenue under win percent maximisation increases competitive balance and raises player salaries. As league revenue increases and shared league revenue becomes a larger proportion of a team's total revenue, teams' total revenues become more alike and the win percents for teams tend to equality, with player salaries rising at the same time. This is in contrast to the effect of league-revenue sharing under profit maximisation, where increases in shared league revenue have no impact on the teams' (marginal) revenues and therefore have no effect on either teams' win percents or the level of player salaries.

4.8 EQUALISATION LEVY

The effect of an increase in the equalisation levy (a levy on all match goers paid into a central fund and distributed equally amongst the clubs) is similar to the effect of an increase in gate sharing assuming win percent maximisation. The larger is the equalisation levy, the greater will be the increase in competitive balance. An equalisation levy would have to be twice that of the visitor gate share in order to achieve the same effect. For

example, the effect of an equalisation levy of 10% is identical to that of a 95-5 home-visitor split of the gate. Thus, in order to achieve the same effect as 50-50 gate sharing, an equalisation levy of 100% would be necessary.

5 VFL/AFL COMPETITIVE BALANCE 1985-1998

In this chapter, I assess the likely effect on competitive balance and league revenue of the combined effect of the various devices (national player draft, team salary cap, gate and league-revenue sharing) used in period 6 (1985-1998). The likely impact on competitive balance of the trade in players and draft choices is also discussed.

Where the draft system allows a player to nominate his 'required' football payments when drafted, an enforceable salary cap is required, otherwise the system could be subject to abuse through players nominating very high payments to avoid being drafted by weaker clubs. Whilst it does seem possible for some manipulation at the margin through the use of nominated football payments, there is clearly a limit to the extent this can be exploited as a club runs up against its team salary cap. Even in the absence of 'nominated football payments', the requirement for clubs to demonstrate

that a player's 'reasonably anticipated football payments' must be fitted within the team salary cap, reinforces the draft. Moreover, the existence of the player draft and the requirements associated with being able to draft a player seem to assist the League in policing the salary cap, at least at the margin.

Furthermore, gate sharing and league-revenue sharing lessen the differences in revenue between clubs that would otherwise occur, and therefore lessen the likelihood of clubs undoing the equalising effect achieved by the player draft and team salary cap. It is also argued that the use of these devices to increase competitive balance may actually increase revenues, and hence raise players' salaries.

An argument attributed to Noll in Fort and Quirk (1995) is that the trade in players and in draft choices can decrease competitive balance. My modelling of this argument in the US literature confirms the view that, under profit maximisation, even in the absence of cash sales of player talent, unbalanced trade of players and draft choices can partially undermine the equalising effect of a player draft when wage levels are high. However, the addition of an enforceable team salary cap (and

minimum team salary) removes the incentive to undertake unbalanced trades.

There are two circumstances that may lead to unbalanced trades undermining the effectiveness of a player draft in the VFL/AFL. First, a team may want to reduce its player talent in order to meet a budget constraint. Where teams are win percent maximisers, if wage levels under the player draft are high relative to a team's revenue (and revenue is less adversely affected as win percent falls), a team otherwise facing a loss can avoid exceeding its budget constraint through the trade of net player talent. Whilst competitive balance will be reduced, the undermining of the effect of the player draft is not total. The effect on competitive balance is the same as occurs where cash sales of talent are allowed. However, if the player draft is supplemented with an enforceable team salary cap designed to allow all teams to at least break even, then there will be no incentive for (net) player talent to change teams.

Secondly, a club wishing to reduce its debt in order to survive financially might temporarily behave as if it were a profit maximiser and (provided revenue is less adversely affected) trade (net) player talent and achieve a lower win percent. In such circumstances, the higher is the unit cost of

player talent under the player draft, the more incentive there is for a club to reduce its player talent through 'unbalanced trades'. If the cost of player talent is high enough playing strengths may be even less equal than they would be under the free agency outcome where both teams are assumed to be win percent maximisers. But, the addition of an enforceable team salary cap limits the attractiveness to players of player trades, the net result being an increase in competitive balance compared with the win percent maximisation free agency outcome.

In summary, the combined player draft and team salary cap has the potential to equalise the distribution of playing talent, and thereby contribute to higher levels of competitive balance. Resulting league revenue increases can be shared between the clubs, the players and other stakeholders in the game (such as grassroots football and junior development). Moreover, lessening differences in clubs' financial strengths decreases the ability of clubs to undermine the very devices that helped to achieve the increase in competitive balance.

6 MEASURING COMPETITIVE BALANCE

In measuring competitive balance, Vrooman (1996) suggests that most studies have concentrated on the closeness of league competition within the season and the dominance of large market clubs. Competitive balance ratios (measuring the dispersion of teams' season win percents relative to the idealised dispersion when all teams are assumed to have equal playing strengths) are often used to compare the closeness of competition within seasons.

Table 6.1 and Figure 6.1 show the competitive balance ratios for the VFL/AFL based on teams' win percent data for the home and away seasons between 1897 and 1998. The lower the competitive balance ratio the more even is the competition within the season.

An interesting feature of Figure 6.1 is the very high level of unevenness in the competition at the end of each of the periods, with two exceptions. The first exception is during WWII at the end of period 3 (1930-1944), before gate sharing was introduced. Perhaps the evenness during WWII was thought to be an aberration and one impact of the war was to change the ideology of VFL administrators to a more egalitarian one. The other exception is at the end of period 6 (1985-1998), with the player draft and

team salary cap, where there is a noticeable downward trend in competitive balance ratios (improvement in competitive balance). One possible interpretation for the changes to new combinations of labour market and/or revenue sharing rules is that the VFL/AFL perceived whatever system at the time to be ineffective, as evidenced by the very high competitive balance ratios (unbeknown to these administrators) at the end of several periods. Club administrators/players might just have needed enough time to work out how to circumvent the particular devices in operation at the time.

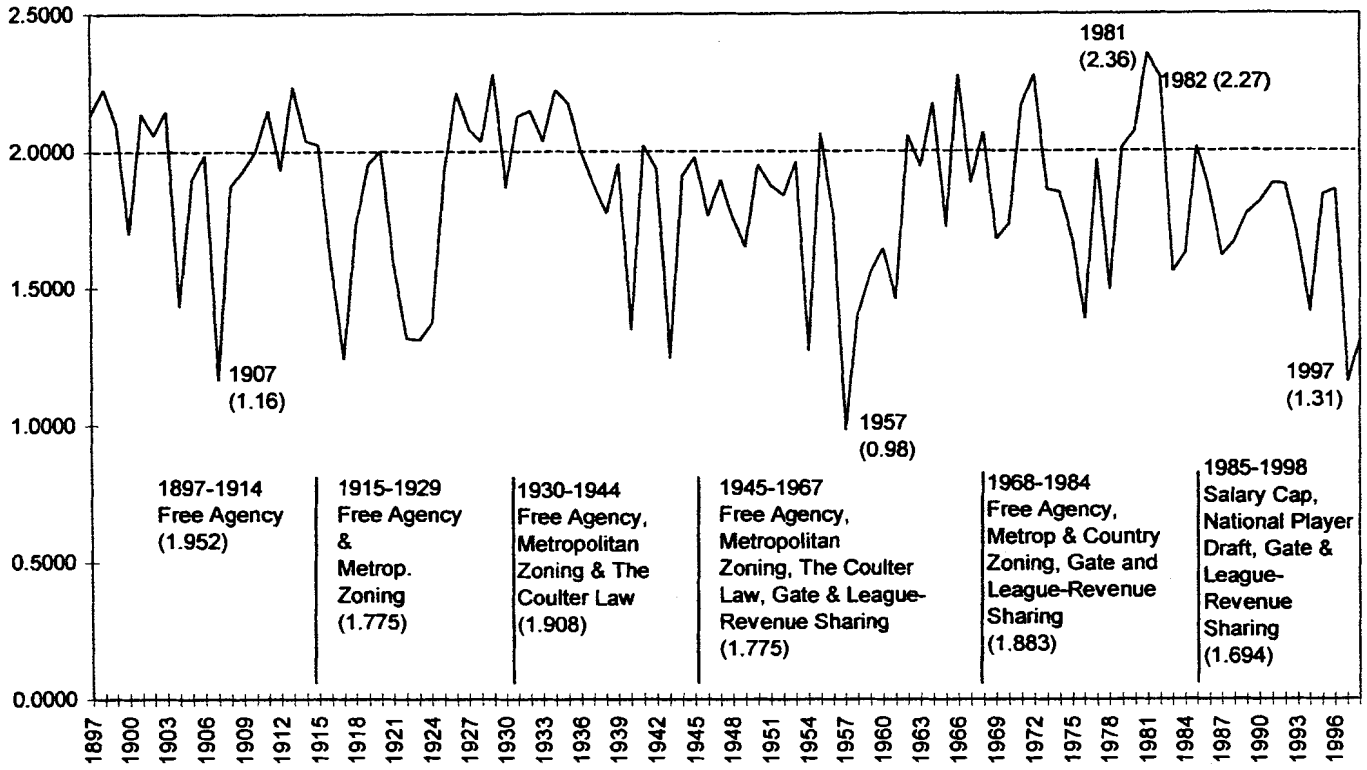
At the end of period 1 of free agency (1897-1914), the competition was very uneven. In each of the five years from 1910 to 1914 the competitive balance ratio was greater than 2 (with the exception of 1912 when it was 1.9322). At the end of period 2 of free agency and metropolitan zoning (1915-1929) the competitive balance ratio was above 2 for four successive years between 1926 and 1929. However, the introduction of the Coulter Law in 1930 did little to redress imbalance in the competition with the ratio remaining 2 or above from 1931 until 1936, after an initial fall to 1.8659 in 1930. In all the years after 1936 until the end of period 3 in 1944, only once in 1941 was the competitive balance ratio above 2. As mentioned above, this would suggest some motivation other than addressing perceived

competitive imbalance as the reason for the introduction of gate sharing in 1945.

Table 6.1 Competitive Balance Ratios, Rounds, VFL/AFL 1897-1998

Year	Rds	CB Ratio	Year	Rds	CB Ratio	Year	Rds	CB Ratio
1897	14	2.1339	1931	18	2.1257	1965	18	1.7213
1898	17	2.2262	1932	18	2.1452	1966	18	2.2751
1899	17	2.1004	1933	18	2.0344	1967	18	1.8810
1900	17	1.6977	1934	18	2.2215	1968	20	2.0656
1901	17	2.1386	1935	18	2.1731	1969	20	1.6758
1902	17	2.0580	1936	18	2.0000	1970	22	1.7321
1903	17	2.1454	1937	18	1.8782	1971	22	2.1638
1904	17	1.4297	1938	18	1.7743	1972	22	2.2747
1905	17	1.8981	1939	18	1.9555	1973	22	1.8566
1906	17	1.9852	1940	18	1.3472	1974	22	1.8464
1907	17	1.1632	1941	18	2.0184	1975	22	1.6697
1908	18	1.8738	1942	15	1.9343	1976	22	1.3844
1909	18	1.9293	1943	15	1.2411	1977	22	1.9656
1910	18	2.0028	1944	18	1.9100	1978	22	1.4902
1911	18	2.1499	1945	20	1.9770	1979	22	2.0094
1912	18	1.9322	1946	19	1.7622	1980	22	2.0707
1913	18	2.2336	1947	19	1.8918	1981	22	2.3549
1914	18	2.0385	1948	19	1.7547	1982	22	2.2680
1915	16	2.0242	1949	19	1.6490	1983	22	1.5570
1916	12	1.5679	1950	18	1.9508	1984	22	1.6237
1917	15	1.2383	1951	18	1.8733	1985	22	2.0132
1918	14	1.7321	1952	19	1.8353	1986	22	1.8505
1919	16	1.9543	1953	18	1.9603	1987	22	1.6157
1920	16	2.0000	1954	18	1.2693	1988	22	1.6652
1921	16	1.5855	1955	18	2.0638	1989	22	1.7707
1922	16	1.3123	1956	18	1.7533	1990	22	1.8091
1923	16	1.3070	1957	18	0.9813	1991	22	1.8781
1924	16	1.3693	1958	18	1.4011	1992	22	1.8749
1925	17	1.9225	1959	18	1.5546	1993	20	1.6713
1926	18	2.2132	1960	18	1.6415	1994	22	1.4078
1927	18	2.0794	1961	18	1.4561	1995	22	1.8387
1928	18	2.0367	1962	18	2.0548	1996	22	1.8540
1929	18	2.2812	1963	18	1.9413	1997	22	1.1555
1930	18	1.8659	1964	18	2.1731	1998	22	1.3121

Figure 6.1 Competitive Balance Ratios in the VFL/AFL 1897-1998



At the end of period 4 (1945-1967), there is again a period of significant competitive imbalance. The ratio reached an all-time low in 1957 (0.9813) before rising rapidly in the years before the introduction of country zoning in 1968. In the six years between 1962 and 1967, three times the ratio is above 2 and two other years had ratios above 1.88. Finally, near the end of period 5 (1968-1984), just before the introduction of the team salary cap in 1985, there were four successive years (1979-1982) when the ratio was above 2. Indeed, 1981 (2.3549) and 1982 (2.2680) have the highest competitive balance ratios (the lowest levels of competitive balance) in the history of the VFL/AFL.

Predictions made in the thesis are that in general the competitive balance ratios would probably fall over the six periods identified as successively more stringent restrictions were placed on the operation of the players' labour market and revenue sharing became more significant. The most even year of competition in the home and away season based on the competitive balance ratios was 1957 (0.9813), but this observation is an outlier. The 1997 season (1.1555) was the second most even competition followed closely by 1907 (1.1632). The 1998 season, the last in this time series, was the eighth most even with a competitive balance ratio of 1.3121. As

mentioned above, unevenness of competition peaked in the early 1980s, with the two most uneven years being 1981 and 1982. But, since then, there appears to have been a general downward trend in these competitive balance ratios.

Table 6.2 shows the average ratios for the six different periods identified. The average competitive balance ratio over the whole history of the VFL/AFL is 1.8337. As predicted, period 6 (1985-1998) with the player draft, team salary cap and gate and league-revenue sharing is the most even of any, returning the lowest average ratio (1.6940) of any period.[4]

Table 6.2 Average Competitive Balance Ratios VFL/AFL 1897-1998

Periods of Labour Market Intervention and Revenue Sharing	**CB Ratio**
(1897-1914) Free Agency	1.9520
(1915-1929) Free Agency and Metropolitan Zoning	1.7749
(1930-1944) Free Agency, Metropolitan Zoning & the Coulter Law	1.9083
(1945-1967) Free Agency, Metropolitan Zoning, The Coulter Law, Gate-Sharing and League-Revenue Sharing	1.7749
(1968-1984) Free Agency, Metropolitan Zoning, Country Zoning, Gate Sharing and League-Revenue Sharing	1.8829
(1985-1998) Team Salary Cap, National Player Draft and League-Revenue Sharing	1.6940
(1897-1998) Average	1.8337

[4] An hypothesis test was conducted to determine whether the mean competitive balance ratio (1.6940) for period 6 (1985-1998) was significantly lower than the mean competitive balance ratio (1.8547) for periods 1 to 5 (1897-1984) without the player draft and team salary cap. With a t statistic of 1.8889, there is a significant difference between the mean competitive balance ratio in the two periods at the 5% level, a

Also consistent with my theoretical prediction is that the most uneven period was that of free agency in period 1 (1897-1914), which has the highest ratio of 1.9520. Moreover, the predicted decline in competitive balance ratios (evening-up of the competition) over time is evident, but with two exceptions.

Historically, period 2 (1915-1929) was one of a relatively high level of competitive balance (1.7749). Perhaps metropolitan zoning was accepted and effective until at least seasons 1926 to 1929, all of which have ratios above 2, indicating a relatively uneven competition at the end of this period prior to the introduction of the Coulter Law in 1930. Period 5 (1968-1984) was characterised by the introduction of country zoning to combine with free agency, metropolitan zoning and gate and league-revenue sharing. Given the prevalence of the payment of transfer fees and interstate recruiting, this period had a lower competitive balance ratio (1.8829) than might have been expected. But, as previously discussed, by the end of this period, the VFL/AFL was most concerned about what it perceived to be a very uneven competition and one in which the financial health of some of its member clubs was in jeopardy. The unevenness of the competition

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result consistent with the predictions of the effectiveness of a combination of a player draft, a salary cap and gate and league-revenue sharing. Alternatively, the *p*-value of the *t* test value is .03090.

resulted in the introduction of the team salary cap and the national player draft in an attempt to address these perceived problems.

6.1 COMPARISONS WITH US LEAGUES

Table 6.3 compares competitive balance ratios calculated by Vrooman (1995) for US leagues between 1970 and 1992 with those calculated for the VFL/AFL over the corresponding period. In general, it appears that the evenness of competition in the VFL/AFL compares not unfavourably with US leagues. The VFL/AFL's average competitive balance ratio over the period 1970-1992 was 1.858. The average ratios in the National League (NL) and the American League (AL) in Major League Baseball (MLB) for the same period were slightly lower, 1.826 and 1.761 respectively. The MLB and VFL/AFL ratios are plotted in Figure 6.2. Vrooman (1995) describes Major League Baseball over the period as having unrestricted free agency (from 1976) after being 'bound' to a team for 6 years, no salary cap, 10-20 per cent gate sharing and a moderate amount of media revenue sharing. The National Basketball Association (NBA) was the most uneven with a ratio of 2.621 and the National Football League (NFL) was the most even with a ratio of 1.568. Figure 6.3 shows the NBA to be a much more uneven competition than the VFL/AFL, which in turn is not as even as the

NFL. Vrooman (1995) characterises the NBA as having liberal free agency, a so-called 'soft' salary cap, no gate sharing and a moderate amount of sharing of league media revenue. However, the more even NFL over the period in question featured a strict policy on free agency, a 60-40 gate sharing formula and a high degree of sharing of league media revenue

Table 6.3 Competitive Balance Ratios VFL/AFL, AL, NL, NBA & NFL 1970-92[5]

Year	VFL/AFL	AL	NL	NBA	NFL
1970	1.732	2.410	1.564	2.182	1.537
1971	2.164	2.128	1.641	2.655	1.403
1972	2.275	1.744	2.103	3.400	1.701
1973	1.857	1.718	1.641	3.600	1.724
1974	1.846	1.154	1.974	2.418	1.478
1975	1.670	1.897	1.897	2.145	1.873
1976	1.384	1.564	2.051	1.909	1.873
1977	1.966	2.513	2.051	1.782	1.590
1978	1.490	2.231	1.615	2.018	1.376
1979	2.009	2.333	1.821	1.873	1.392
1980	2.071	2.051	1.590	2.764	1.496
1981	2.355	1.949	2.179	2.927	1.392
1982	2.268	1.769	1.590	2.782	1.704
1983	1.557	1.872	1.564	2.927	1.392
1984	1.624	1.487	1.385	2.091	1.680
1985	2.013	1.872	2.231	2.655	1.568
1986	1.850	1.410	1.923	2.618	1.672
1987	1.616	1.641	1.513	2.800	1.400
1988	1.665	1.949	1.949	2.873	1.344
1989	1.771	1.667	1.513	2.945	1.440
1990	1.809	1.462	1.462	3.164	1.624
1991	1.878	1.564	1.564	2.873	1.744
1992	1.875	1.615	1.692	2.891	1.656
Ave	**1.858**	**1.826**	**1.761**	**2.621**	**1.568**

[5] The AL, NL, NBA and NFL data are taken from Vrooman (1995).

Figure 6.2 Competitive Balance Ratios VFL/AFL, AL & NL 1970-1992

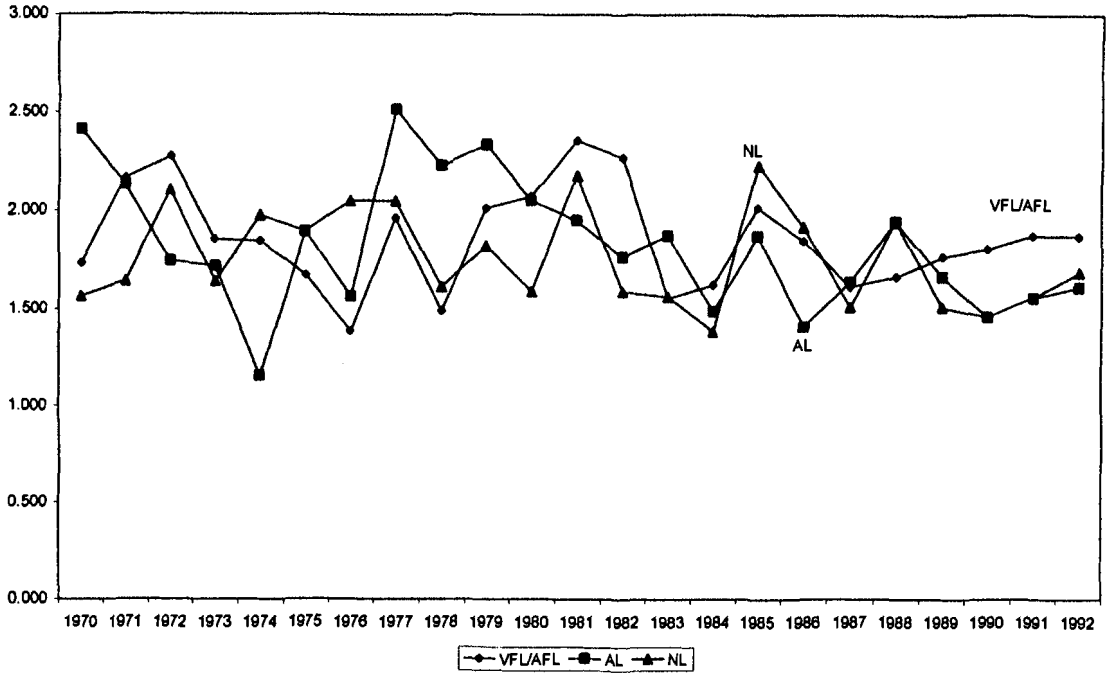
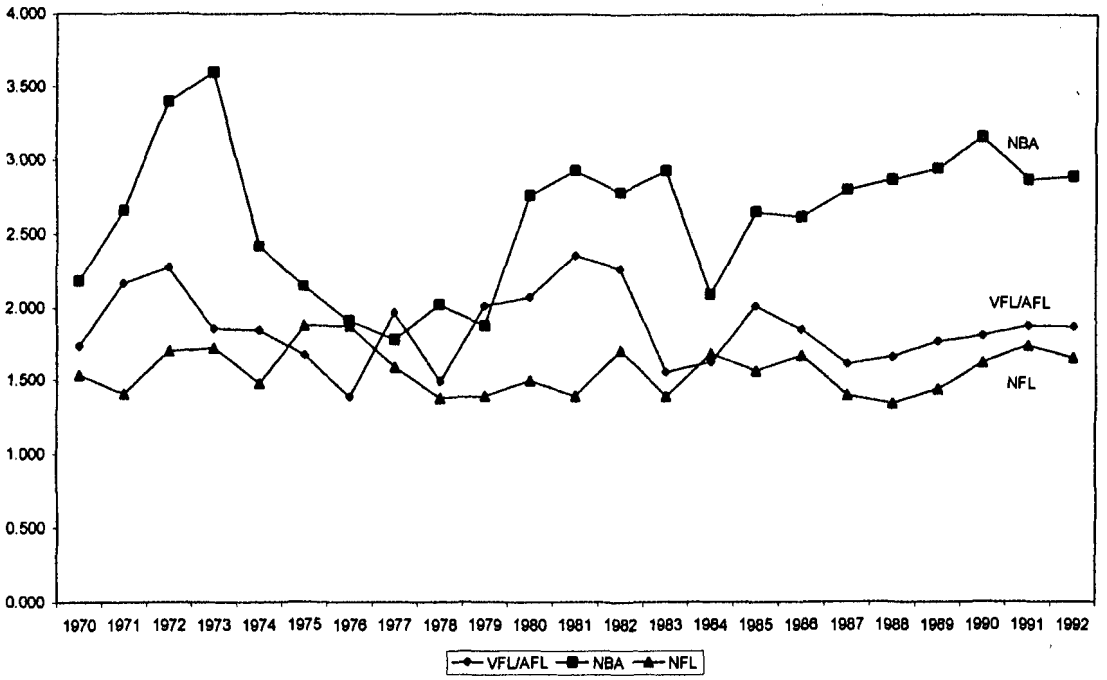


Figure 6.3 Competitive Balance Ratios VFL/AFL, NBA & NFL 1970-1992



By way of comparison, there is more in common between the NFL and the VFL/AFL in terms of labour market and revenue sharing devices, than there is between the NBA and the VFL/AFL. It should therefore not be surprising that the level of competitive balance in the VFL/AFL is more akin to that of the NFL than the NBA.

7 CONCLUSIONS

7.1 FREE AGENCY MORE UNEQUAL UNDER WIN PERCENT MAXIMISATION

My analysis confirms the general conclusion that compared with the profit maximisation free agency outcome the win percent maximisation free agency outcome results in less equal playing strengths but higher unit costs of player talent. Leaving aside the issue of player salaries for the moment, this conclusion alone provides a strong justification for the use of devices which improve the level of competitive balance in leagues where clubs are not profit maximisers but rather win maximisers, such as in the VFL/AFL.

7.2 REVENUE SHARING INSUFFICIENT

Some economists argue that revenue sharing would be sufficient to achieve a satisfactory level of competitive balance, without the need for a player draft and/or team salary cap. As discussed earlier, 50-50 gate sharing helps to create more equality in playing strengths than would otherwise occur. Alternatively, if the only revenue of clubs were that from shared league revenue, the effect would be to create equal playing strengths.

But, club revenue data shows that net gate revenue as a proportion of club revenue declined from 6.81% in 1994 to 5.67% by 1998. Moreover, in spite of the increases in league revenue over this period, the AFL distribution to clubs as a proportion of club revenue also declined, from 18.93% in 1994 to 13.85% in 1998.[6] In spite of financial equalisation, the proportion of clubs' revenue arising from revenue sharing has decreased over this period as the clubs have found new ways of raising revenue. Thus, even with gate revenue shared on a 50-50 basis and league revenue shared equally amongst the teams, further inequality in club revenue streams will arise because of teams' different levels of membership revenue and club sponsorship. Moreover, if the growth in non-football income (such as from

[6] Data supplied by Kevin Lehmann, Finance Director, AFL.

gaming which is not able to be equalised) is uneven, then gate sharing and league-revenue sharing alone would be even less likely to move playing strengths towards equality. Thus, any evaluation of the efficacy of revenue sharing as a means of achieving competitive balance must recognise that different VFL/AFL markets have different revenue earning capacities and are likely to continue to do so in the immediate future.

7.3 TEAM SALARY CAP EFFECTIVE IF ENFORCEABLE

A team salary cap should be effective in achieving equal playing strengths, provided it can be enforced. Thus, the argument over the effectiveness of team salary caps ultimately reduces to the empirical problem of whether team salary caps are enforceable. Recent salary cap breaches might be interpreted as an indication of the difficulty of enforcement, or alternatively, of evidence of the successful enforcement of the cap by the AFL. Given the inherent uncertainty concerning the enforcement of team salary caps, it is not surprising that the VFL/AFL decided to supplement it with a player draft.

7.4 NATIONAL PLAYER DRAFT AND TEAM SALARY CAP

The argument has been made that the current VFL/AFL combination of a player draft and team salary cap is more effective in achieving equal playing strengths than either device would be in isolation. Whilst it does seem possible for some manipulation at the margin through the use of nominated football payments, there is clearly a limit to the extent this tactic can be employed as a club approaches its team salary cap. In the absence of nominated football payments, the general requirement for the club to have to demonstrate that a player's salary will fit under its cap before that player can be drafted means that the team salary cap is being used to reinforce the player draft. The intent of the league's requirement is to prevent a strong team being able to draft so much player talent that unequal playing strengths result. Furthermore, the existence of the player draft with the requirements associated with being able to draft a player seem to assist in policing the team salary cap. In cases where a team salary cap exists but is not enforceable, a player draft will at least provide some control on the destination of players.

There are two circumstances that may lead to unbalanced trades undermining the effectiveness of a player draft in the VFL/AFL, assuming

revenue is less adversely affected as win percent falls. First, a team may want to reduce its player talent in order to meet a budget constraint. The second really lies outside the working assumptions of my win percent maximisation model, that is, where a club wishes to reduce its debt in order to survive financially and temporarily behaves as if it were a profit maximiser by trading talent to achieve a lower win percent.

7.5 REVENUE AND SALARIES GROWTH

Initially, the imposition of a player draft and enforceable team salary cap has the effect of increasing competitive balance, possibly at the expense of lowering player wages. However, this does not necessarily imply that the effect of the salary cap is to lower player wages in the longer term. This is because the potential exists for significant increases in league revenue broadcast rights (and league sponsorship) from the more-even competition that will increase the revenue of clubs and result in rises in player salaries under the guidelines for the setting of the team salary cap. Moreover, any increase in shared league revenue to clubs tends to equalise club revenues thereby making clubs' capacity to pay players (and other inputs) more equal.

7.6 EPILOGUE

In summary, this thesis provides strong theoretical and empirical support for the view that recent labour market intervention in the form of a player draft and a team salary cap (together with gate and league-revenue sharing) has increased competitive balance in the VFL/AFL.

My adaptation of Fort and Quirk's (1995) profit maximising model to one where teams are win percent maximisers subject to a budget constraint leads to some quite different theoretical conclusions. In particular, under win maximisation, free agency results in a less equal distribution of player talent whilst gate sharing and (increases in) shared league-revenue each tend to equalise playing strengths.

Moreover, theory is used to show that a player draft and team salary cap can help to equalise the distribution of playing strengths of clubs and thereby improve competitive balance in the VFL/AFL. The empirical evidence assembled also lends strong support to the hypothesis that the revenue sharing, player draft and team salary cap combination has enhanced competitive balance.

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