

Governing the league: opportunism, credible threats and social ties in football competition licensing

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Summary

We examine the comparative effectiveness of three alternative licensing systems in professional football. The three systems' main concern is with the promulgation of responsible financial behaviour among football clubs. To that effect, all three systems rely on entry control and ex ante budget approval rights. However, the three structures also differ, especially with regard to the way in which they seek to impose ex post budgetary discipline. We analyse these differences, using Transaction Cost Economics as our basic frame of reference. Both theoretically and empirically, we demonstrate that the effectiveness of the licensing arrangements depends on the credibility of the punitive measures available to the governing body. We also find evidence to suggest that social ties may partly substitute for formal deterrence and enforcement.

1. Introduction

Football is big business. Millions of people watch the game, either in the stadium or on television, and the amount of money involved in professional football competitions is considerable. Just to give a rough indication of the economic significance of football: collective revenues of the 20 largest clubs in the 2006/07 season totalled € 3.7 billion, and this figure excludes player transfer receipts and property development (Deloitte, 2008). National football competitions are typically being governed by a national football association, like the Bundesliga in Germany, the Football Association in the UK, and the KNVB (the Royal Dutch Football Association) in the Netherlands. To promote a high quality competition, these governing bodies commonly rely on a form of entry control: only football clubs that meet certain pre-set requirements are given a license that allows them to enter the competition. These requirements encompass legal aspects, infrastructure, safety, et cetera, but the licensing systems tend to emphasize clubs' financial solidity. The reason for this is that the financial position of most clubs is not particularly strong, while bankruptcy of a club during the football season would seriously disturb the competition. Thus, prevention of insolvency ranks high on the associations' organizational agenda.

Because bankruptcy is usually not in the best interest of individual clubs either, one might expect that both the association and the clubs share a common interest in its prevention, and that the promulgation of sound financial policies would not require special contractual attention. That, however, is not the case. Clubs' behaviour appears to be strongly driven by athletic ambitions and supporters' sentiments, rather than by financial prudence. When athletic performance does not meet expectations, the default response of the average club is to attract new players in an effort to turn its fate. But given the costs involved in such transfers, this is a high risk strategy that could easily lead to severe financial distress. In professional football, there is a strong link between athletic success and financial revenues, and poor performance in the arena might cost clubs millions of euros in income. Therefore, underperforming clubs all too easily become trapped in a vicious circle. Low performance in the competition erodes their financial position (which usually was not very good to begin with), while the almost Pavlovian response of investing in new footballers further endangers financial solidity. In many instances, however, clubs seem prepared to take this risk, apparently because of the overriding urgency of sport-related concerns.

Against this background, the governing bodies' challenge is to design a contract that stimulates and enforces financial diligence on the part of the clubs. Using Transaction Cost Economics (TCE; Williamson, 1975, 1985, 1996) as our basic frame of reference, we analyse three such contracts: (1) the old Dutch licensing system that was being used until 2003, (2) the new Dutch system which is in effect since 2004, and (3) the German system. These three systems share a strong emphasis on ex ante budget approval, but they differ in terms of disciplinary actions open to the governing body. In the old Dutch system, the only action the governing body could take when confronted with unapproved budget overruns -apart from imposing a relatively small fine- was to exclude the club from the competition. We argue that this is not an effective way to persuade clubs to refrain from hazardous financial behaviour, because the threat of exclusion is not credible. Execution of this threat would run counter to the association's main objective -which is to ensure an undisturbed competition. In fact, the KNVB has never used this exclusionary right. The new Dutch system offers a broader and much more nuanced array of corrective actions, and we expect this system to be more effective. Interestingly, the German system is identical to the old Dutch system, but for one theoretically consequential difference: whereas in the old Dutch system, the licensing committee consisted of independent experts, the Bundesliga committee comprise members elected from the ranks of the football clubs themselves. We conjecture the German system to be more effective than the old Dutch system in mitigating opportunism (but less effective than the new Dutch system), because the social ties and the associated reputation effects inherent in the German approach might (partly) compensate for the lack of credibility of the threat.

Using a unique dataset made available to us by the KNVB and the Bundesliga, we find support for our hypotheses. The new Dutch system and the German system are about equally effective, suggesting that social ties may actually substitute for more formal deterrence. We also find that if social ties cannot be activated (as in the old Dutch system), lack of credibility is in fact a major impediment to effective control.

Our paper aims to contribute to the literature in several ways. We examine a non-standard solution to the familiar hold-up problem. Usually, hold-up hazards would lead to internalization or at least to some form of hostage exchange. In football competition licens-

ing, neither solution is available, and parties to the transaction need to seek recourse to unconventional transaction-specific safeguards. In our study, these take the form of entry control, coupled with various alternative arrangements to mitigate the risk of opportunistic breach of the contract. Analyzing these safeguards, our paper illustrates the richness of the repertoire of governance, and demonstrates that these non-standard practices are well within the purview of TCE reasoning. TCE has been applied to a wide variety of governance issues, ranging from vertical and lateral integration, via franchising and dealing arrangements to labour market contracting (see Boerner & Macher, 2002; Rindfleisch & Heide, 1997; Shelanski & Klein, 1995, for overviews of empirical research in TCE). This paper adds a new and somewhat unusual case to the list, further underlining the versatility of the theory. But more importantly, our data provide the rare opportunity actually to measure differential governance effectiveness. Only few empirical studies have fully addressed TCE's central discriminating alignment hypothesis (David & Han, 2004). One reason for this is that a direct examination of comparative governance effectiveness usually requires one to include in the calculus the (counterfactual) costs of organizational forms not chosen (cf. Masten, 1993; Masten, Meehan & Snyder, 1991). In the words of Buckley & Chapman (1997: 136): "[t]ransaction costs are funny things: the most important of them exist not in reality, but in realities that have been avoided, in worlds that have not come to be". Our research setting involves a quasi-experimental study of various real-life governance alternatives, including at least one potentially inefficient one. This allows a genuinely empirical assessment of the differential contribution to effectiveness of isolated elements of governance design choice, highlighting the empirical relevance of threat credibility and -albeit more tentatively- the role of social ties in supporting effective governance.

The remainder of the paper is organized in three main sections. Section 2 provides some general background information and describes and examines the three governance structures (the old and the new Dutch system and the German arrangement) from a TCE perspective. This section concludes with propositions as to the relative effectiveness of these three structures. In section 3, we operationalize the propositions. Also in this section, we report on the quantitative analysis and the resulting findings. Section 4 provides conclusions and discusses this study's implications and limitations.

2. Licensing in professional football

2.1 General background

The main objective of a football association is to promote a high quality competition. Obviously, the quality of the competition depends to a large extent on the perceived attractiveness of the sport as such and on the excitement aroused by individual matches, but these factors cannot be influenced directly by the association. Rather, the role of the association as the governing body is to ensure the quality of the organizational and technical infrastructure to support the competition. This includes for instance the quality of refereeing, the technical condition of the stadiums, safety regulations, and the like. In this paper, we focus on one very prominent aspect of the association's role, which is to ensure and monitor the financial health of clubs playing in the competition.

Safeguarding clubs' financial solidity is a high priority issue. Apart from the obvious costs associated with insolvency, bankruptcy of a club during the football season interferes with the association's main objective of ensuring a high quality competition. Bankruptcy of a club during the football season implies that the ranking becomes affected by other than sport-related factors. This runs counter to the basic conception of the competition as an exclusively athletic tournament, in which 'the best man wins'. Yet, insolvency risks are very real indeed, for the financial position of most clubs is not particularly strong. Table 1 provides some figures to illustrate this claim. As this table shows, the Dutch competition in total is actually losing money, the summated loss from operations averaging € 19 million per year. Most individual clubs also lose money; less than 20% of the clubs is able to make an operating profit. The average club returns a loss from operations of about € 0.5 million yearly on a total revenue of € 10 million. The German situation is somewhat better. The mean operating profit equals € 1.3 million, which is about 3.5% of net revenue. But almost 30% of the clubs report losses, some of these being quite large.

[TAKE IN TABLE 1 ABOUT HERE]

To address the insolvency risks, both the Dutch and the German governing bodies rely on a kind of entry control, formalized in their respective licensing systems. These systems stipulate that only clubs that meet certain pre-set requirements can obtain a licence to participate in the professional competition. The requirements are supposed to guarantee that clubs that meet them have sufficient financial resources at their disposal to be able to fund their operations.

Entry control is a prospective governance device, focused on ex ante selection based on a thorough pre-action examination of plans and expected future outcomes. It centres on ex ante budget approval, and the agreed upon budget becomes the cornerstone of the contract between the association and individual clubs. The various licensing arrangements we consider in this paper are identical in their reliance on entry control mechanisms. They do, however, differ in the way in which they seek to assure that clubs take the budget-based contract seriously, i.e. how they ensure that clubs actually commit themselves to the budget, and how they ensure that clubs remain committed during contract intervals. Deferring the discussion of these 'ex post' governance differences to the next section of this paper, we now focus on why commitment issues in professional football are particularly challenging.

The financial requirements in the licensing arrangements intend to secure the continuous presence of a sufficiently stable financial basis to allow clubs to survive. Because survival is presumably also what most clubs want, one might expect these requirements not to be very controversial. The fact, however, is that they are the source of ongoing and oftentimes acrimonious debate. This has to do with widely diverging opinions as to what constitutes a sufficiently stable foundation and, relatedly, with differences in risk attitudes between the governing body and the clubs. The association tends to be risk averse. It wants ex ante guarantees as to the fundability of the club's aspirations for the upcoming season and beyond, and no surprises afterwards. Also, the governing body has a strong preference for 'structural finance', i.e. sustainable and guaranteed longer-term funding. Clubs on the other hand do not always seem to approach the financial side of their business as a major issue per

se. Rather, their main and much more urgent concern is with athletic performance. Financial management is at best a means to an end, and repeatedly, clubs have shown to be prepared to sacrifice financial stability for the sake of the sport. This behaviour is especially prevalent in situations in which a club finds itself unable to realize its athletic ambitions. Clubs are under constant pressure to live up to their supporters' expectations. Moreover, there is a strong link between athletic and financial performance, especially in the top of the league. The best performing clubs in the national premier league can qualify for European cup football, which is quite lucrative indeed: participating in the UEFA Champions League for instance boosts revenues with at least € 10 million¹. But this relationship is also present at other levels in the competition. A club's share in the television rights for instance depends on that club's rank in the competition. Also, well-performing clubs find it easier to attract sponsors. For these reasons, clubs feel a compelling urge to act when confronted with failing athletic achievements. The action set, however, is apparently not large, and the favourite option considered by clubs comes down to hiring and firing. Both are costly. Hiring new players on the transfer market typically involves large sums of money. Sometimes, the required funds can be found by selling players that no longer fit the club's strategy. But this alternative is only available to a few clubs. Moreover, footballers being quite idiosyncratic, the market for an individual player is generally rather thin, and it is not always easy to find an interested party to the exchange. If sale is not feasible, simply firing expendable players (or coaches) might entail considerable costs relating to redemption clauses.

The problem with attracting new footballers is, that it hardly ever helps to solve the acute financial problems. On the contrary; it can be argued that in the short run, the expected value of an investment in new players is usually negative. Building a new and better team takes time, and if at all successful, the associated benefits will only be realized sometime in the future. Thus, although the efforts may be hailed by the fans and may secure enduring club loyalty, they may very well be financially irresponsible. From a strictly financial point of view, this is an intriguing paradox: in reaction to the financial pressure associated with disappointing athletic performance, clubs frequently choose a response that for all practical purposes can only further erode their already quite weak financial position. It is quite clear that such a response is unacceptable to the association.

To illustrate the kind of behaviour clubs engage in, consider the remarkable case of the Dutch premier league club FC Utrecht. In the early 1980s, the City of Utrecht funded the construction of a new football stadium. By the end of the 1990s, the City sold the stadium to a fully owned subsidiary of the club for the symbolic amount of NLG 1 (the equivalent of less than € 0.5). The club used the stadium as collateral to acquire bank loans, which it subsequently used to cover its operating losses and to buy new footballers. Unfortunately, in 2003 the club proved unable to pay interest and instalments on its loans, which by that time

¹ This figure relates to Dutch clubs, and is a fair estimate of the minimum amount a Dutch clubs would receive just for entering the UEFA competition. The figure includes central distributions from the UEFA, additional gate receipts, and broadcast revenues. The amount rises sharply if the club is subsequently successful in that competition. For clubs in the larger football countries (especially England, Spain, Italy, Germany, and France), the additional income from participating in the UEFA competition is much higher.

amounted to approximately € 40 million. The club saw no other option than to sell its stadium, using the proceeds to repay its debts.

It is beyond the scope of our paper to attempt to explain this 'irrational' behaviour. For our purposes, it suffices just to accept it as a fact, and then to work through the governance ramifications. Nevertheless, some additional discussion seems warranted. One point to make here is that although clubs' behaviour is hard to explain from the axioms of expected utility theory, it is in fact consistent with descriptively more accurate theories like prospect theory (Kahneman & Tverski, 1979). Prospect theory explicitly allows for risk-seeking behaviour, even predicting the prevalence of risky choices when people must choose between a sure loss and a substantial probability of a larger loss (Tverski & Kahneman, 1992). Such behaviour has also been documented empirically. For instance, Post et al. (forthcoming) in a recent study of action choices made by contestants in a large-payoff television game show found that risk aversion decreases after prior expectations were shattered by unfavourable outcomes of previous rounds of the game. This situation resembles that of football clubs confronted with disappointing athletic performance, and their behaviour is strikingly similar.

Another consideration that might help to understand clubs' risky behaviour relates to governance and control at the level of the club and its relations with its financiers. At that level, there are essentially no checks and balances to keep clubs from risky financial action choices. In a regular firm, shareholders and banks would prevent such decisions in an effort to protect their investments. However, only few clubs have shareholders, and most have no access to bank funding. Instead, most football clubs rely on a small circle of wealthy individuals whose involvement is more emotional than financially motivated. These fan-financiers do not seem to care much for their investments and do not act as the typical residual claimant (which de facto they are). Their behaviour is driven by love for the club, and they see their investments as a source of fun rather than income, i.e. as an expensive but rewarding hobby. Consequently, instead of restraining the almost exclusive fixation on athletic aspirations, these financiers actually reinforce it. Moreover, it is not uncommon for the fan-financiers to act as a lender of last resort, and sometimes, they are prepared to vouch for their club's financial deficit. Even though these financiers are under no obligation to do so, clubs seem to assume almost automatically that these financiers will come to their rescue should the need for that arise, thus reducing the perceived urgency of solid financial planning even further. It is nevertheless quite clear that the clubs' usual response remains extremely risky, even if their fan-financiers are in fact willing to cover for any remaining financial needs. The point is that new loans further decrease the club's solvency, while the associated additional interest charges intensify cash needs. Also, the fan-financiers can terminate their involvement at will. Their continuous participation is inherently uncertain, and from the point of view of the association, intensifying one's reliance on the potentially whimsical moods of a small group of individuals hardly qualifies as a structural solution. This trepidation is founded in experience. Consider for instance the unhappy story of Vitesse, a Dutch premier league club. Until a couple of years ago, the major part of this club's funding was being provided for by a firm whose CEO happened to like football. This CEO, however, got fired, and the firm instantaneously withdrew its patronage, leaving the club practically ruined. In a desperate campaign for its survival, the club managed to raise new funding, the predominant share coming from three private financiers. One of these, however, insists on anonymity for fear of his wife finding out

about his new hobby. But given the amount of his spending, one cannot help to worry that this can only be a matter of time.

2.2. A theoretical assessment of the licensing systems

In the previous section, we already discussed the common reliance on ex ante budget approval as a prospective governance device. We also showed that clubs experience strong incentives to realize their sport-related ambitions, and that these incentives tend to drive out financial prudence. Consequently, the governing bodies' challenge is to design a contract that stimulates and enforces financial diligence on the part of the clubs, i.e. a contract that ensures that clubs actually commit to the budget, and remain committed during contract intervals. The three licensing arrangements we consider in this study differ in how they seek to ensure this commitment.

Apart from the right to impose an inconsequentially small fine, the Dutch system that was in effect until 2003 only had one instrument at its disposal to discipline all too reckless clubs, which was to exclude the club from the competition. This threat, however, is not credible. It should be noted that the KNVB has never actually used this exclusionary right, even though clubs have occasionally shown a remarkable disrespect for the budget, and have put themselves on the brink of bankruptcy (some of them repeatedly so). This lack of credibility originates from asset specificity and the implied lock-in effects. The association being the only supplier of the required organizational platform, it effectually has a monopoly on the professional football competition. Clubs, therefore, depend on the association to be able to compete in the league. However, the dependency is reciprocal, and to accomplish its goals, the association also depends on the participation of the clubs. This reciprocal dependency condition sometimes exists right from the start, for any competition simply must include the top notch clubs. Excluding these clubs would emasculate the entire competition, and is simply inconceivable. The lower ranked clubs on the other hand are more or less interchangeable in the eyes of the general public, and are not critical in principle. Although their supporters would disagree, it is very well possible to organize a high quality competition without any particular club of lower rank. However, even though asset specificity associated with these clubs may be low initially, this condition changes as soon as they acquire a licence. Once admitted to the competition, the continued participation of each individual club -whether top notch or more modestly ranked- becomes essential, for exclusion of any club during the season would severely disrupt the competition. Thus, the entry decision by the governing body itself affects asset specificity. This is a specific example of the more general process known as the 'fundamental transformation' (Williamson, 1985). This term refers to the fact that asset specificity does not exclusively reside in pre-existing conditions, but can also have contractual origins (Williamson, 1996). The effect, however, is the same: the relationship between the governing body and each individual club becomes imbued with mutual dependency. Consequently, the threat of exclusion is not credible. Football clubs know that execution of that threat would run counter to the association's leading objective of ensuring a high quality competition, and hold-up problems predictably arise. Banking on the association's leniency, clubs need not sincerely commit to their budget, knowing that even substantial budget overruns will eventually be accepted by the association. This would be

different if opportunistic behaviour during the contract interval had repercussions on subsequent license renewal decisions. The old Dutch licensing system, however, did not provide for this possibility, and each renewal request was processed without taking into account previous experiences with the club. Besides, the threat of such repercussions would be ineffective anyway to discipline the top clubs, because -as discussed earlier- their participation in the competition is so essential that even the thought of their exclusion is just about absurd.

The old Dutch system's inability to bolster ex post budget commitment also has some rather perverse ex ante consequences. Because clubs are well aware beforehand that the budget will not be enforced anyway, their incentive to submit realistic budgets is weak. This further debases the licensing arrangement. The system rests crucially on the idea of entry control, i.e. on a prospective review of a club's financial position. This of course assumes realistic forecasts. Clubs on the other hand are tempted to submit a budget that allows them to survive the screening process, even if they know that budget to be overly optimistic. To be sure, the governing body may demand additional information to assess the reasonableness of the club's financial projections. But substantial information asymmetry is bound to remain. Moreover, the association cannot withhold a license merely because it questions the financial prospects of a club. For such a consequential decision, it needs hard and objective facts. The upshot is, that clubs usually get the benefit of the doubt.

These issues of self-disbelieved budgets and exploitable information asymmetry are not merely hypothetical. Over the years, the KNVB has regularly been confronted with unrealistic budgets. Consider for instance the case of NAC Breda, one of the smaller clubs competing in the Dutch premier league. Based on the submitted budget, the KNVB concluded that the club's liquidity was insufficient, and the licensing committee informed the club that it would withhold the license. Soon after that, the club presented a document declaring that a seemingly trustworthy third party was prepared to cover for the cash deficit, and the club got its license after all. During the season, the club -as expected- ran into financial difficulties. The KNVB asked the club to draw on the guarantee, only to discover that the original document was annulled by a side letter retracting the initial promise. Eventually, the club managed to survive by selling its stadium.

In conditions of high asset specificity and considerable information impactedness, the default TCE prediction is that hybrid governance gives way to internalization. Full implementation of the hierarchical solution implies the clubs and the association to be brought under common ownership. Evidently, this is not a feasible option. There are, however, other ways to increase the clubs' commitment to the budget; the new Dutch system being one of them. Compared to the old system, the licensing arrangement instituted by the KNVB in 2004 offers a much richer package of enforcement mechanisms. The new system still affords the governing body the ultimate option of exclusion (which is still not credible), but adds to this a right to intervene, plus a new set of punitive measures.

If the financial performance of a club drops below some critical threshold level qua solvency, liquidity, and budget discipline, the new licensing system grants the association the authority to intervene in the financial affairs of the club, i.e. to instruct club management to develop and implement a financial recovery plan. The plan is a strict covenant between the club and the association, specifying concrete action steps and detailed time-bound milestones to be reached by the club. Also, the association intensifies monitoring, doubling the financial

reporting frequency for underperforming clubs from the usual two times a year to a quarterly cycle. Unless ratified by the governing body beforehand, not meeting the targets and deadlines stipulated in the plan automatically leads to the imposition of a penalty. These penalties range from public admonition of first offenders to the subtraction of competition points to lower the position of persistently noncompliant clubs in the competition ranking. These measures are less draconic than exclusion and are, therefore, more credible. Obviously, withdrawing competition points still distorts the competition, bringing in non-athletic factors to influence the ranking. As a consequence, this penalty does not accord very well with the association's ultimate goal. Initially, this led some clubs to question the association's willingness actually to invoke this clause. However, the clubs soon found out that the KNVB is in fact prepared to use the penalty, removing any doubts as to its credibility.

This package of instruments helps to position the budget as a formally binding contract. The intervention rights have two important effects. Because clubs value their autonomy, the intervention clauses serve as a threat to deter non-compliance. But they also allow reasonably timely damage control should a club still cross the line. Moreover, in the new regime, clubs can and will be penalized for budget overruns that jeopardize their financial stability, and the penalties actually hurt. Although some clubs may not be impressed very much by a public reprimand, they surely worry about the threat of losing competition points. Also, in the new system there is no longer a gain to be had in submitting self-disbelieved budgets. This improves the informativeness of the budget and, hence, the power of the prospective review.

In the analysis above, we already referred to a central TCE proposition: hierarchical governance is best equipped to deal with the contractual problems associated with conditions of high asset specificity and information impactedness. It should be noted that the intervention rights in the new licensing system are inherently hierarchical in nature. Therefore, the structure redesign can be interpreted as an attempt to approximate hierarchical governance. Even though the new system with its reliance on formal contracting and contract-based incentives (punishments) is still largely an example of the hybrid mode of governance, the structure has at least become more hierarchical. Given that full internalization is not feasible, this might be the best one can do. For these reasons, we expect the new licensing system to be an improvement over its predecessor. Accordingly:

H1: The new Dutch licensing system is more effective than its predecessor in restraining opportunistic breach of the budget-based contract.

It is interesting to observe that the German licensing system is basically identical to the old Dutch system, but for one major difference: whereas the Dutch licensing committee consists of independent experts, the German association opted for a committee of club representatives. These club officials know one another. They deal with one another on the transfer market, they join forces to lobby for common causes, they regularly meet on football-related events and possibly on social occasions as well, et cetera. This frequent interaction creates an atmosphere that fosters a sense of peer group allegiance. Consistent with the social network literature (e.g. Granovetter, 1985; Gulati, 1998; and -especially- Jones, Hesterly & Borgatti, 1997), we believe that this social context influences the attitude of the clubs towards the budget: in the German alternative, the budget is not just bureaucratic red

tape imposed by a group of faceless technocrats, but a much more engaging promise among peers. Therefore, we conjecture that the German system is more effective than the old Dutch system in mitigating opportunistic behaviour. Nevertheless, in the German system -as in the old Dutch system- the only option open to the association when confronted with unacceptable budget overruns is to exclude the club from the competition. Even though we expect the social ties and the associated reputation effects inherent in the German approach partly to compensate for the lack of credibility of the threat, we do not claim that these social mechanisms can fully substitute for the formal deterrence and enforcement devices available in the new Dutch structure. Therefore, we hypothesize the effectiveness of the German system to be somewhere in between the two Dutch alternatives:

H2: The German licensing system is more effective than the old Dutch system in restraining opportunistic breach of the budget-based contract, but less effective than the new Dutch structure.

3. Measurement, analysis, and results

3.1 Sample and data

The licensing systems we study apply to clubs playing in the professional football competitions. The German and the Dutch associations organize two competitions each: a premier league competition and a second tier competition. The total number of clubs playing in these competitions in both countries is about equal: 36 in Germany and 37 in the Netherlands². Our dataset contains information on both the budgeted and the actual results from operations (comprising revenue, personnel costs, and other operating costs) for the five consecutive years 2001-2005 for each club in the Dutch competition. For each German club we collected the same data for the years 2004-2005. Our dataset is complete; all clubs are represented in the set, and there are no missing observations.

3.2 Measuring governance structure effectiveness

The primary goal of the licensing system is to ensure an undisturbed competition. As described in previous sections, the overriding concern of the association is with the financial position of the clubs, and the governing bodies' most taxing challenge is to design a contract that stimulates and enforces financial diligence on the part of the clubs. For this reason, the performance of the governance structure can be assessed by examining the degree to which the structure is successful in preventing financially hazardous behaviour. Probably the most direct way to measure this particular interpretation of relative governance structure effectiveness would be to look at clubs' liquidity and solvency under various licensing regimes. This option, however, is not open to us because of data limitations.

² To be precise, the current number of clubs in the Dutch competition is 38. A new club entered the second tier league in 2005. We exclude this club from our analysis because it has not been exposed to the old licensing system.

We develop two alternative metrics to capture the performance of the systems. The first of these is an operating result measure (OPRES). This proxy expresses the result from operations as a percentage of net revenue, providing a broad and general indication of the quality of financial performance. We use this metric to assess whether the three governance regimes differ in their effects on clubs' financial outcomes. It must be noted, however, that the operating result metric is a noisy indicator of governance structure effectiveness. Although we believe that governance structure design influences financial outcomes, it is obviously true that a great many other factors might interfere. Therefore, we also use a second metric, which more accurately and more directly reflects governance-related behavioural effects.

The second measure quantifies effectiveness in terms of the difference between budgeted and actual results from operations, deflated by net revenue. We refer to this metric as budget discipline (BUDGETDISC). Consistent with our analysis in the previous section, we submit budget discipline to be a highly relevant proxy for two main reasons. Firstly, it expresses the predictability of clubs' financial outcomes. We argued that the budget is an essential instrument in the governing body's monitoring repertoire, for it is the basis for the ex ante review of plans and expected outcomes. This prospective review should ensure timely intervention, but it can only do so if the budget is in fact informative of actual outcomes. An effective licensing system, therefore, must secure budget discipline, and the degree to which actual outcomes systematically meet (or beat) the budget is a telling indicator of that system's quality. Secondly, a budget overrun negatively affects the club's liquidity and solvency. Since most clubs lack sufficient financial reserves, a lower than expected operating result tends to imply rather acute additional cash needs and a stronger reliance on inherently unstable fan-financier funding.

We are interested in the systematic effects of the three different licensing regimes on our effectiveness measures. To reduce the influence of non-governance related events in our data, we average the scores per club on our measures over the relevant years. For the old Dutch system, our dataset contains observations for the three years (2001-2003) preceding its abandonment; for both the new Dutch system and the German alternative, the data span a two-year period (2004-2005). Thus, the variables relating to the old Dutch licensing system are calculated by taking the mean yearly score over a three-year period, whereas for both other regimes, we take the average of the scores over the two years for which we have data. The two effectiveness measures are correlated, but the individual metrics contain at least some unique information: within-regime Spearman's rho statistics range from 0.507 ($p = 0.002$) to 0.953 ($p = 0.000$).

Table 2 gives descriptive detail with regard to both effectiveness measures. This table provides some remarkable facts about football finances. For instance, it shows that the average club operating under the old Dutch regime overspent its budget by about 20% of revenue. The average operating loss amounted to 19% of revenue. The worst performing club reported an average budget overrun of no less than 84% of its total revenue per year over the period 2001-2003. That same club incurred an average operating loss of 150% of revenue per year. Given such facts, the KNVB's concern about the effectiveness of its licensing system is understandable.

[TAKE IN TABLE 2 ABOUT HERE]

3.3 The Dutch systems compared

A quick glance at table 2 suggests that the implementation of the new Dutch licensing system in 2004 has led to a quite dramatic improvement in the effectiveness of governance. The mean operating result is still negative in 2004-2005, but the average loss of 6.5% of revenue is much smaller than the mean loss of 19% incurred in the previous period. Budget discipline has also improved considerably, the average budget overrun dropping from more than 20% of revenue under the old regime to about 6% in 2004-2005.

Moving beyond casual impressions, a formal test of the differential effectiveness of the old and new licensing structures involves an examination of the effects of both structures on our test variables. Because the observations come from the same group of clubs, we use a paired sample approach. An examination of the paired differences between each of the effectiveness proxies reveals that the distribution of the budget discipline differential is sufficiently close to normal to allow a paired sample t-test. The operating result difference, however, is not normally distributed, suggesting the use of the non-parametric Wilcoxon signed ranks test. Table 3, panel A displays the details of the distribution and the normality tests.

Table 3, panel B reports the results of the t-test and Wilcoxon test, respectively. In support of our expectations, we find that on both effectiveness measures, the new system performs substantially better than the old one. After the introduction of the new system, the budget overrun drops with 14% of revenue on average, which is a significant improvement ($t = -3.632$; $p = 0.001$). The increase in operating results of about 12.5% of revenue is also significant ($Z = -2.919$; $p = 0.004$).

[TAKE IN TABLE 3 ABOUT HERE]

To rule out alternative explanations, we investigate the extent to which our findings are driven by other events, not related to the licensing system redesign. We identify two potential interfering causes. One of these is a change in accounting principles. Such a change could lead to a more positive image of a club's financial position, even if the underlying financials remain unchanged. We can, however, positively reject this potential explanation: over the period of time we consider, there have been no accounting principle changes.

The other possible source of noise involves an 'autonomous' improvement in the financial performance of the football sector. This is in fact what happened: in 2005 the premier league clubs negotiated a new television rights contract, leading to a significant increase in revenues³. These higher revenue levels may be the true cause of the effectiveness results just reported, because they improve the ability of a club to fund its athletic ambitions without

³ We are reasonably sure that this is the only influential non-governance related event that occurred. We checked for other revenue affecting events by comparing revenues across consecutive years. For all pairs of successive years, we find that revenue levels are stable, the only exception being 2005 in which year we observe a statistically significant increase in revenues compared to the immediately preceding year 2004 ($Z = -3.598$, $p = 0.000$).

seeking recourse to ad hoc finance. To circumvent this interfering cause, we run two additional analyses. First, we compare the scores on the effectiveness proxies in the old system with the outcomes of only the first year after the system redesign (i.e. the year 2004). These outcomes precede the 2005 broadcast contract and, hence, are not affected by that event. In addition, we rerun the original analysis, only using data from the sub-sample of second tier clubs ($N = 19$). Since the new contract applies to the premier league only, the financial performance of the second tier clubs is independent of the new television contract. The results of these analyses are in panel C of table 3. As before, we use a paired sample t-test if appropriate; if distributional problems do not allow this, we resort to a Wilcoxon signed ranks test. In both additional analyses, we find that the new licensing system significantly outperforms the old structure, reinforcing the initial findings, and supporting our hypothesis.

3.4 The German system versus the new Dutch system

As an initial exploratory step, we compare the outcomes of the new Dutch system with those of the German licensing structure over the two-year period 2004-2005. The basic descriptives are in table 2 above. Because the distributions of both effectiveness variables are not normal (OPRES: Shapiro-Wilk statistic = 0.867, $p = 0.000$; BUDGETDISC: Shapiro-Wilk statistic = 0.839, $p = 0.000$), we use the Mann-Whitney test to establish the existence of any non-chance differences between the two systems. Table 4, panel A presents the results of this initial analysis. We find no statistically significant difference between the two countries in terms of budget discipline ($Z = -0.154$, $p = 0.877$). We do, however, find that the German system outperforms the Dutch system when it comes to operating results: whereas the average German club returns a profit from operations of 2% of revenue, the mean Dutch operating result is a loss of about 6.5%, the difference being convincingly significant ($Z = -2.924$, $p = 0.003$). This finding contradicts our second hypothesis, which proposed that the new Dutch system would be the most effective of the three arrangements we consider.

This initial exploration, however, ignores a consequential fact about the two countries: measured by revenues, the average German club is about 3.5 times as large as its Dutch counterpart. As argued earlier, a higher revenue base improves the fundability of a club's aspirations, *ceteris paribus*. Therefore, the initial results might be driven by size rather than by licensing system effects.

[TAKE IN TABLE 4 ABOUT HERE]

To remove the size effect, we regress both effectiveness proxies on the log of revenue, and we take the residuals from these regressions as the size-adjusted measures of licensing system effectiveness (details of the regressions not reported). With the residuals, we rerun the Mann-Witney tests⁴. The details of these more decisive tests can be found in table 4, panel B. The findings indicate that the German and the new Dutch systems are equally

⁴ The distributions of the size-adjusted effectiveness metrics deviate from normality: the Shapiro Wilk statistic is 0.871 ($p = 0.000$) and 0.861 ($p = 0.000$) for the operating result measure and budget discipline respectively.

effective if measured by the operating result metric, but that the Dutch system is more effective in promoting budget discipline, the difference being only marginally insignificant at conventional significance levels ($p = 0,110$)⁵. Thus, we conclude that the quality of both licensing arrangements is approximately similar, the new Dutch system having a slight edge over the German solution⁶.

4. Conclusions and discussion

In this paper, we examined the comparative effectiveness of three alternative licensing systems in professional football. Analysing the objectives and elementary composition of the three structures, we find that the arrangements have much in common. The three systems' main concern is with the promulgation of responsible financial behaviour among individual clubs competing in the top-tier leagues, and they largely rely on similar instruments to affect that result. For instance, entry control and ex ante budget approval rights are part of the shared repertoire of governance. However, the three structures also differ, especially with regard to the way in which they seek to impose budgetary discipline. In the old Dutch system, the only option open to the governing body when confronted with budget overruns was to exclude the club from the competition. This is not a credible threat, and we hypothesized that this structure cannot be very effective in tying clubs to the budget. The German system is identical to the old Dutch system, but for one major difference: whereas the Dutch licensing committee consists of 'technocrats', the German association opted for a committee of club representatives. We believe that this social context influences the attitude towards the budget: in the German alternative, the budget is not just bureaucratic red tape, but a more engaging promise among peers. Therefore, we hypothesized that the German arrangement is more effective than the old Dutch system. The new Dutch system offers a much richer array of control and enforcement mechanisms. The new system still grants the governing body the ultimate option of exclusion (which is still not credible), but adds to this the authority to initiate revision of financial policies during budget intervals, and a set of credible punitive measures, ranging from public admonition to the withdrawal of competition points. This package of instruments helps to position the budget as a formally binding contract. Accordingly, we proposed that the new Dutch system is more effective than its predecessor. We also conjectured that the new Dutch system is more effective than the German system, but not dramatically so, arguing that the social ties activated in the German situation may partly substitute for formal deterrence and enforcement.

We tested these hypotheses, using a unique dataset made available to us by the KNVB and the Bundesliga. Our findings support the expectations. We found convincing evidence for

⁵ Following standard practice, all p-values reported in this paper are two-tailed. Given that we test directional hypotheses, one might argue one-tailed testing to be more appropriate. In that case, the budget discipline result would meet the usual significance norm.

⁶ This conclusion -in conjunction with our assessment of the relative effectiveness of both Dutch systems- almost automatically implies that the German approach is more effective than the old Dutch system. This is in fact the case. For sake of brevity, we choose not to report the details of the formal analysis of the German arrangement versus the old Dutch system.

the expected inferiority of the old Dutch system. We also found that the new Dutch system is marginally more effective than its German counterpart, at least qua ability to promote budget discipline. These findings underscore the importance of threat credibility, and suggest that informal mechanisms may in fact substitute for more formal governance.

Our study has some limitations that should be recognized when interpreting the evidence in this paper. These include the limited number of years represented in our dataset. Regarding the Dutch post-redesign period, we base our test on the two years immediately following the introduction of the new system. It is conceivable that clubs need longer fully to adjust their behaviour to the new system. If that is true, the new equilibrium might not have been reached yet, and our data might not fully reflect the long-term effects of the redesign. Additionally, our assessment of the German system only spans two years. This short time period need not adequately represent the underlying structural trends.

Another caveat is particularly important: the evidence relating to the efficacy of social ties to advance budget discipline is just circumstantial. Although observed behaviour is consistent with the social relations argument, we have not directly tested whether social embeddedness is the true cause of this behaviour. Therefore, we cannot exclude the possibility that some other factor systematically or spuriously associated with 'Germanness' drives the results. It is tempting to speculate on what these potential other factors might be. Some would argue that cultural differences may play a role, and that Germans are culturally predisposed to take contracts more seriously than the Dutch. Others would perhaps suggest that the effectiveness effects have nothing to do with Germanness as such -nor with social relations- but with the fact that a committee composed of insiders has better monitoring potential because of its informational advantage over outsiders. We leave these speculations for what they are, and emphasize that our interpretation is only tentative.

An interesting feature of our research design is that it affords a truly comparative analysis of the effectiveness of alternative governance structures. Especially the paired sample set-up to assess the effects of the Dutch system change is methodologically attractive. Of course, it is usually not possible for a researcher to create such a quasi-experimental research setting, and we were extremely lucky just to stumble on one. Nevertheless, it is quite likely that there are similar cases 'out there', just waiting for researchers to be discovered. Such cases provide unique opportunities to further our understanding of the economics of organization and control.

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TABLE 1
Financial performance professional football (x € 1,000)

	Sum	Mean	St. Dev.	Minimum	Median	Maximum
Netherlands (yearly average 2001-2005)						
• revenue	370,071	10,002	14,850	1,538	3,945	67,133
• operating result	-18,930	-512	2,218	-7,808	-456	7,801
Germany (yearly average 2004-2005)						
• revenue	1,345,176	37,366	38,952	6,505	25,842	192,842
• operating result	47,398	1,317	7,951	-33,765	1,317	25,654

TABLE 2
Descriptive statistics

Variable	Mean	St. Dev.	Minimum	Median	Maximum
Old Dutch system					
• OPRES	-18.965	28.866	-150.527	-10.728	10.016
• BUDGETDISC	-20.640	21.490	-84.419	-13.163	2.431
New Dutch system					
• OPRES	-6.506	14.185	-36.769	-2.091	17.887
• BUDGETDISC	-6.283	13.057	-50.895	-1.285	8.468
German system					
• OPRES	2.195	11.978	-51.449	3.502	21.407
• BUDGETDISC	-3.454	8.996	-39.283	-2.495	11.895

OPRES = (operating result)/(net revenue)x100%

BUDGETDISC = (budgeted operating result - actual operating result)/(net revenue)x100%

TABLE 3

Analysis of the Dutch systems

Panel A: Distribution and normality test

Paired difference	Mean	St. Dev.	Skewness	Kurtosis	Shapiro-Wilk	p
OPRES	-12.460	25.225	-1.841	6.189	0.867	0.000
BUDGETDISC	-14.357	24.047	-0.827	1.084	0.954	0.132

Panel B: Tests of differential effectiveness

WILCOXON SIGNED RANKS TEST (N = 37)		N	Mean rank	Sum of ranks	Z	p
OPRES _{new} - OPRES _{old}	Negative ranks	11	14.36	158	-2.919	0.004
	Positive ranks	26	20.96	545		
	Ties	0				
PAIRED SAMPLES T-TEST (N = 37)					t	p
BUDGETDISC _{new} - BUDGETDISC _{old}					-3.632	0.001

Panel C: Additional analyses

Full sample results; 2004 versus 2001-2003						
WILCOXON SIGNED RANKS TEST (N = 37)		N	Mean rank	Sum of ranks	Z	p
OPRES ₀₄ - OPRES _{old}	Negative ranks	13	14.92	194	-2.376	0.017
	Positive ranks	24	21.21	509		
	Ties	0				
PAIRED SAMPLES T-TEST (N = 37)					t	p
BUDGETDISC ₀₄ - BUDGETDISC _{old}					-2.663	0.012
Sub-sample results; second tier clubs only						
PAIRED SAMPLES T-TEST (N = 19)					t	p
OPRES _{new} - OPRES _{old}					-2.056	0.055
BUDGETDISC _{new} - BUDGETDISC _{old}					-2.735	0.014

TABLE 4
The German versus the new Dutch system

Panel A: Initial analysis

MANN-WHITNEY TEST (N = 73)		N	Mean rank	Sum of ranks	U	Z	p
OPRES	Germany	36	44.36	1597	401	-2.924	0.003
	Netherlands	37	29.84	1104			
BUDGETDISC	Germany	36	37.39	1346	652	-0.154	0.877
	Netherlands	37	36.62	1355			

Panel B: Final analysis

MANN-WHITNEY TEST (N = 73)		N	Mean rank	Sum of ranks	U	Z	p
OPRES (size-adjusted)	Germany	36	39.11	1408	590	-0.839	0.402
	Netherlands	37	34.95	1293			
BUDGETDISC (size-adjusted)	Germany	36	32.97	1187	521	-1.600	0.110
	Netherlands	37	40.92	1514			