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The organisational effectiveness of professional sports clubs in Poland

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ABSTRACT

The organisational effectiveness of professional sports clubs is a fundamental point of reference for the evaluation of the management process in professional sports clubs.

The purpose of the article was to evaluate the level of effectiveness in professional sports clubs as measured by the calculation of investment costs borne by the clubs in order to secure the acquisition of one point at top-level sports events, as well as the calculation of costs of securing one point at top-level sports events.

The research involved 52 professional football, basketball, volleyball, and speedway clubs active in Poland from 2001 to 2011.

The conducted analysis indicated the following: a great diversity among the clubs regarding expenses incurred to obtain the rights to issue professional player contracts (in football clubs), as well as a poor correlation between the costs borne and the points won. The high costs borne by certain clubs did not directly translate into high results at sports events.

KEY WORDS: SOURCES OF INFORMATION FOR INNOVATION; INNOVATION ACTIVITY; INNOVATION; MHT; HT.

1. ADMISSION

From 1990 to 2014, around 150 professional sports clubs registered as joint stock companies were established in Poland. However, 65,3% of them became inactive as a result of various difficulties (Pawlak, Smoleń 2011). In order to manage these entities in an effective way, it is necessary to adopt well-balanced criteria (benchmarks) as a measure of their effectiveness. It is not, however, an easy undertaking: organisational effectiveness, including the effectiveness of professional sports clubs, is a notion that can be understood in different ways and is multidimensional. This is because organisational effectiveness is a concept that requires conceptualisation and operationalisation.

Key concepts that are useful for researching the effectiveness of professional sports clubs discussed in the scientific literature are as follows (Gulan 2010; Kuc 2015):

1. The teleological perspective, aimed at the evaluation of organisational effectiveness from the perspective of the achieved objectives.
2. The productivity perspective, which views organisational effectiveness from the perspective of the productivity of internal processes.
3. The resource perspective, which evaluates the effectiveness of sports clubs understood as their capability of obtaining rare resources.

The method involving teleological evaluation of the effectiveness of sports clubs is quite popular, but it proves correct only when the objective is easily identifiable,

easily measurable, and time-specified¹. Problems appear when an organisation pursues many objectives that are not easily measurable and are of variable significance conditioned by the changing temporal perspective.

The second well-known approach to the evaluation of the effectiveness of sports clubs is the concept that focuses on the internal processes occurring within the examined entities. These include business barometers (liquidity, profitability, and indebtedness), efficiency of information flow, internal coordination of the organisation, levels of employee satisfaction, etc. (Gulan 2010, p. 40). This approach makes it possible to collate many different entities. Its weakness, however, lies in the fact that it does not incorporate distinct associations with the broadly understood environment of the organisation or with the achievements of sports clubs.

The resource-based approach evaluates an organization's quality and quantity of human, material, financial, and information resources. From the perspective of this approach, a sports club with the most valuable assets, the highest income, the best players, and the greatest number of supporters is considered to be effective. Such a model of assessment is of little value when sports clubs are even partially financed from public funds (Gulan 2010, p. 41).

The fourth approach to the effectiveness of sports clubs quoted in the literature assumes as the point of reference the level (degree) to which the key expectations of the clubs' stakeholders are met. It presumes that groups with different vested interests may have different expectations, and that they assess the effectiveness of a club from the perspective of their own objectives. "According to this approach, whether an organisation is effective cannot be discussed in general terms. What can be examined is the extent to which an organisation is effective from a particular point of view" (translated from Polish, Gulan 2010, p. 41).

The approaches to the evaluation of the effectiveness of professional sports clubs discussed in the literature are mostly analytical and are used mainly to determine short-term effectiveness.

Nowadays, many sports clubs focus on achieving short-lived rather than long-term success. The experts point out that there is a certain difficulty in measuring long-term effects. Focusing attention on a few selective measures that result from evaluation cannot constitute a ba-

sis for the assessment of strategic management (Kuc 2002, p. 192).

If a goal formulated for a strategy is to "maintain the potential for development and competitiveness of a company in a long-term perspective" (translated from Polish, Romanowska 2009, p. 19), the chances of estimating the long-term effectiveness of professional sports clubs become high. In such a context, the effective strategy is the one that enables the company to maintain its potential for development and competitive strength in a long-term perspective.

In order to timely assess the risk of bankruptcy and business failure in the case of professional sports clubs, an attempt was made to implement discriminatory models in the assessment of such risk. Of the many discriminatory models discussed in the literature, three were selected: models by D. Hadasik (1998), A. Hołda (2001), as well as one by M. Hamrol, B. Czajka and M. Piechocki (the so-called "Poznań model") (2004).

As a result of the implementation of the multiple indicator models by A. Hołda, D. Hadasik, and the "Poznań model" in the assessment of financial standing, it was concluded that the level of risk of bankruptcy and business failure was different in the three different groups of subjects studied. The risk was presented by 63.4% of indicators in the case of basketball clubs, 53.3% of indicators in the case of volleyball clubs, and 43.7% of indicators in the case of speedway clubs.

It was also concluded that the examination of the financial standing of sports clubs with the use of discriminatory models enables an early recognition of bankruptcy risks and a timely implementation of remedial processes (Pawlak and Smoleń 2014).

In this article, the level of effectiveness of professional sports clubs was assessed through:

1. The calculation of investment costs borne by the clubs in order to secure the acquisition of one point at top-level sports events.
2. The calculation of costs of securing one point at top-level sports events.

The research involved 52 professional football, basketball, volleyball, and speedway clubs in Poland active between 2001 and 2011.

These were clubs, that were active for at least 5 years. They represented 34.7 % of all sports clubs - joint stock companies set up for life in the years 1990-2014 .

¹ According to the so-called SMART criteria, the objectives should be stated in a simple (S) way, be measurable (M), achievable (A), relevant (R), and time-specific (T).

2. THE INVESTMENT COSTS BORNE BY PROFESSIONAL SPORTS CLUBS IN ORDER TO SECURE THE ACQUISITION OF ONE POINT IN THE LEAGUE

In the course of research, it was not possible to obtain comprehensive data regarding the investment costs borne by the studied clubs. The research only established that the greatest investments were borne by football clubs due to the purchase of the contracts of professional players. Despite the fact that it was not possible to obtain the precise data regarding the contracts, the analysis of collected financial reports of the football clubs

made it possible to separate the net worth of the intangible and legal assets for each year. The data reflected the non-amortized costs borne in the years studied in connection with the purchase of the rights to professional player contracts. The net worth balance of the intangible and legal assets was divided by the number of points obtained in a year by a club in its Ekstraklasa matches. The result represented the approximate calculation of the investment costs borne by individual clubs in order to secure the acquisition of one point at top-level sports events. The results are shown in Table 1.

Table 1. The worth of intangible and legal assets (the non-amortized costs borne in connection with the purchase of the rights to professional player contracts) connected with the acquisition of one point by a club in the Ekstraklasa matches (in million PLN)

No.	Club name	Year											Average outlay per one point [PLN]
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
1	Arka Gdynia						0.008	0.026			0.015	0.010	0.015
2	Dolcan Sport												
3	Górnicy KS Bełchatów						0.049	0.090	0.096	0.031	0.010	0.008	0.047
4	Górnik Łęczna							0.077			0.009		0.043
5	Górnik Zabrze		0.018	0.002	0.008	0.002	0.002	0.083	0.071	0.150			0.042
6	Hutnik Kraków												
7	Jagiellonia Białystok								0.098	0.066	0.106		0.090
8	KKS Lech Poznań				0.011	0.016	0.180	0.167	0.151	0.210	0.181	0.303	0.152
9	KS Piotrcovia												
10	Korona Kielce						0.100	0.125	0.070		0.044	0.025	0.073
11	KŚŁ							0.006	0.021				0.013
12	KSP Polonia Warszawa			0.044	0.189	0.139	0.113			0.045	0.243		0.129
13	KSZO Ostrowiec												
14	Legia Warszawa		0.130	0.040	0.062	0.100	0.168	0.202	0.200	0.138	0.215	0.154	0.141
15	Lublinianka												
16	MKS Cracovia					0.013	0.014	0.011	0.053	0.091	0.152	0.178	0.073
17	Orkan Rumia												
18	Piotrcovia												
19	Ruch Chorzów								0.067	0.045	0.018		0.043
20	Wisła Kraków	0.197	0.196	0.087	0.175	0.162	0.131	0.177	0.082	0.079	0.094		0.138
21	Wisła Płock			0.010	0.013	0.083	0.080	0.047					0.047
22	WKS Śląsk Wrocław									0.061	0.074	0.073	0.069
23	Zagłębie Lubin		0.100	0.061		0.073	0.056	0.067	0.062		0.099	0.179	0.087

Source: own work.

The data presented suggests – albeit fragmentarily – that the Ekstraklasa clubs examined bore disparate expenses in order to secure the acquisition of one point. The greatest sums per point were invested by KKS Lech Poznań (PLN 0.152 million), Legia Warszawa (PLN 0.141 million), Wisła Kraków (PLN 0.138 million), and KSP Polonia Warszawa (PLN 0.129 million). Considerably smaller sums were spent on the rights to acquire professional player contracts by the remaining clubs signing transfers: Jagiellonia Białystok (PLN 0.090 million), Zagłębie Lubin (PLN 0.087 million), and MKS Cracovia Kraków

(PLN 0.073 million). The level of transfer fee expenses incurred by a particular club affected sports results measured in the number of points. This dependency is presented in Table 2. The football clubs demonstrating a considerable worth of the transfer-related intangible and legal assets won a considerable number of points in a year. Conversely, the clubs that bore the smallest transfer-related expenses were usually the weakest in terms of the average number of points won in the Ekstraklasa matches. This implies that the transfer-related expenses of the clubs did reflect on the favourable sports results.

Table 2. The average yearly worth of the intangible and legal assets (ILA) versus the average annual number of points won by individual clubs in the Ekstraklasa

No.	Club name	Average worth (ILA) [PLN]	Average annual number of points [PT]
1	Wisła Kraków	8.127	60.64
2	KKS Lech Poznań	7.840	46.78
3	Legia Warszawa	7.766	54.73
4	KSP Polonia Warszawa	3.315	36.56
5	Zagłębie Lubin	3.148	41.33
6	WKS Śląsk Wrocław	3.015	37.00
7	Korona	2.738	43.80
8	Ruch Chorzów	2.498	36.86
9	Jagiellonia Białystok	2.282	35.75
10	MKS Cracovia	2.038	36.86
11	Górnicy KS Bełchatów	1.751	46.33
12	Górniki Zabrze	1.285	36.18
13	Wisła Płock	1.208	34.86
14	Górniki Łęczna	0.846	34.40
15	Arka Gdynia	0.415	30.60
16	KSŁ	0.396	40.25

Source: own work.

In the case of football clubs, the expenses incurred in order to win one point can vary to a great extent. On average, the individual clubs examined spent from 0.273 (KSŁ) to 1.043 (KKS Lech Poznań) on one point in the competition. Therefore, the difference in the cost of acquiring one point by those clubs is almost fourfold. As for the average number of points won by individual clubs, the differences are not as substantial. The top club

in this ranking, Wisła Kraków (60.64 points/year), out-matched the weakest, Arka Gdynia (30.60 points/year) only twofold.

3. THE COST BORNE IN ORDER TO SECURE ONE POINT

A far more comprehensive set of data (for all four sports disciplines) was obtained concerning the average cost borne by the clubs in order to win one point at top-level sports events. Tables 3–6 present the results of the calculations made. Average costs spent by clubs to gain 1 point in competition at the highest level were obtained by dividing the clubs operating costs by the number of points in the league in different years². The clubs scored different maximum and minimum numbers of points in different sports disciplines, which was primarily the result of a different number of teams at the events held for each discipline. In the period analysed, the football league totalled 16 clubs; basketball – from 1 to 14; volleyball – 10; and speedway – 8.

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² empty space means no data.

Table 3. Football – the cost of securing one point at top-level matches played within the period analysed (in million PLN)

No.	Club name	Year										
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1.	Arka Gdynia						0.282	0.317			0.871	0.734
2.	Dolcan Sport											
3.	Górnicy KS Bełchatów						0.618	0.713	1.014	0.648	0.564	0.487
4.	Górniki Łęczna							0.236			0.420	
5.	Górniki Zabrze		0.238	0.137	0.169	0.259	0.208	0.602	0.713	0.859		
6.	Hutnik Kraków											
7.	Jagiellonia Białystok								0.770	0.632	0.823	
8.	KKS Lech Poznań			0.614	0.682	0.719	0.788	2.111	0.939	0.927	1.168	1.436
9.	KS Piotrcovia											
10.	Korona Kielce						0.336	0.439	0.436		0.583	0.692
11.	KSŁ							0.191	0.354			
12.	KSP Polonia Warszawa		0.479	0.416	0.767	0.761	0.705					
13.	KSZO Ostrowiec											
14.	Legia Warszawa		0.945	0.364	0.462	0.697	0.690	0.898	1.224	1.013	1.390	2.565
15.	Lublinianka											

No.	Club name	Year										
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
16.	MKS Cracovia											
17.	Orkan Rumia											
18.	Piotrcovia											
19.	Ruch Chorzów								0.434	0.459	0.394	
20.	Wisła Kraków	0.512	0.734	0.486	0.621	0.726	0.672	0.932	0.602	0.739	0.736	
21.	Wisła Płock	1.034		0.697	0.499							
22.	WKS Śląsk Wrocław	0.290	0.201							0.493	0.779	0.833
23.	Zagłębie Lubin	0.000	0.384	0.427		0.546	0.543	0.599	0.609		1.132	1.082

Source: own work.

Table 4. Basketball – the cost of securing one point in top-level matches played within the period analysed (in million PLN)

No.	Club name	Year										
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1.	AZS Koszalin							0.063	0.077	0.072	0.078	0.086
2.	Basketball Investments											
3.	Gdyński KK Arka	0.217	0.304	0.216	0.384	0.435	0.509	0.734	0.470	0.597	0.559	0.497
4.	Grono Zielona Góra											0.094
5.	KK Polonia Warszawa			0.154	0.184	0.110	0.049	0.067	0.073	0.064	0.069	
6.	KKS Turów Zgorzelec							0.252	0.309	0.262	0.203	0.271
7.	Słupskie Towarzystwo Koszykówki					0.069	0.072	0.092	0.150	0.124	0.113	0.135
8.	S.S.A. Ostrów		0.075	0.068	0.068	0.063	0.051	0.066	0.104			
9.	Starogardzki KS		0.053	0.042	0.126	0.098	0.062	0.068	0.112	0.078	0.071	0.099
10.	Śląsk Wrocław		0.245	0.203	0.234	0.180	0.160	0.147	0.140			
11.	Wrocławskie Towarzystwo Koszykówki				0.133	0.223	0.200	0.210	0.216	0.168	0.140	0.195

Source: own work.

Table 5. Volleyball – the cost of securing one point at top-level matches played within the period analysed (in million PLN)

No.	Club name	Year										
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1.	Akademicki Związek Sportowy PW						0.080		0.319	0.113		
2.	Asseco Resovia					0.112	0.095	0.157	0.000	0.363	0.342	0.317
3.	Gedania									0.274		
4.	KPS Skra Bełchatów					0.111	0.171	0.279	0.313	0.406	0.438	0.405
5.	KS AZS Częstochowa						0.108	0.161	0.087		0.130	0.124
6.	KS Jastrzębski Węgiel					0.077	0.133	0.181	0.193	0.211	0.217	0.589
7.	Piłka Siatkowa AZS – UWM						0.098	0.107	0.203	0.127	0.227	0.261
8.	Płomień Sosnowiec			0.213	0.112	0.100	0.194					
9.	Trefl Gdańsk											
10.	ZAKSA Kędzierzyn-Koźle		0.101	0.112	0.000	0.227	0.187	0.161	0.166	0.171	0.186	0.304

Source: own work.

Table 6. Speedway – the cost of securing one point at top-level matches played within the period analysed (in million PLN)

No.	Club name	Year										
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1.	CKM Włókniarz						0.001	0.365	0.185	0.258	0.797	0.580
2.	KS Toruń Unibax							0.344	0.236	0.290	0.536	0.366
3.	Speedway Stal Rzeszów						0.002	0.155	0.375			0.458
4.	Unia Leszno						0.001	0.310	0.294	0.483	0.305	0.422
5.	Unia Tarnów Żużlowa				0.114	0.206	0.300	0.451	2.739		0.776	1.376
6.	Wrocławskie Towarzystwo Sportowe							0.249	0.263	0.603	0.377	0.483
7.	Zielonogórski Klub Żużlowy							0.434	0.432	0.339	0.516	0.402
8.	ŻKS Polonia Bydgoszcz							0.443		0.734	0.974	

Source: own work.

It is worth noting that the greatest average number of points in a year was won by Wisła Kraków (60.64 points/year), a club that was only fifth in terms of the costs borne in order to secure one point. The first club in terms of the average costs of one point, KKS Lech Poznań, came third in the average number of points comparison, while Legia Warszawa came second both in the average cost per one point, and in the average number of points in a year ranking. The other point that is worth mentioning is that the clubs that ranked high in cost per point, Wisła Płock and Jagiellonia Białystok (third and fourth, respectively), ranked low on the average number of points won in a year list (13th and 14th, respectively).

Table 7. Football – the average cost of securing one point (million PLN) versus the average annual number of points (PT)

No.	Club name	Average cost per point [PLN]	Average annual number of points [PT]
1.	KKS Lech	1.043	46.78
2.	Legia Warszawa	1.025	54.73
3.	Wisła Płock	0.743	34.86
4.	Jagiellonia Białystok	0.741	35.75
5.	Wisła Kraków	0.676	60.64
6.	Górnicy KS Bełchatów	0.674	46.33
7.	Zagłębie Lubin	0.665	41.33
8.	KSP Polonia Warszawa	0.626	36.56
9.	Arka Gdynia	0.551	30.60
10.	WKS Śląsk Wrocław	0.519	37.00
11.	Korona Kielce	0.497	43.80
12.	Ruch Chorzów	0.429	36.86
13.	Górnik Zabrze	0.398	36.18
14.	Górnik Łęczna	0.328	34.40
15.	KSŁ	0.273	40.25

Source: own work.

In basketball, the differences in average amounts spent on one point are even greater than in football. The club that bore the highest costs per point (Arka Gdynia – PLN 0.448 million) spent six times more per point than the last club on the list, Sportowa S.A. “Ostrów” (only PLN 0.071 million per point). The average number of points won in a year by these two clubs was comparable: the first club won 46.45 points/year; the second won 40.56 points/year. It is noteworthy that the group of basketball clubs studied in this research is diversified to a relatively small extent, which is undoubtedly the result of the scoring system for this discipline (a win – two points; a loss – one point). The difference between the strongest and the weakest club in terms of the average number of points in a year amounts to around 15 points, which is about 50%.

Table 8. Basketball – the average cost of securing one point (million PLN) versus the average annual number of points (PT)

No.	Club name	Average cost per point [PLN]	Average annual number of points [PT]
1	Arka Gdynia	0.448	46.45
2	KKS Turów Zgorzelec	0.260	40.29
3	Śląsk Wrocław	0.187	44.88
4	Włocławskie Towarzystwo Koszykówki	0.186	44.36
5	Słupskie Towarzystwo Koszykówki	0.108	39.27
6	KK Polonia Warszawa	0.096	38.45
7	Grono Zielona Góra	0.094	31.00
8	Starogardzki KS	0.081	38.55
9	AZS Koszalin	0.075	35.13
10	S.S.A. Ostrów	0.071	40.56

Source: own work.

In volleyball, the club which incurred the highest expense per point, KPS Skra Bełchatów, expended PLN 0.303 million/point, while the club with the lowest cost per point, Klub Sportowy AZS Częstochowa, spent only PLN 0.122 million/point. Thus, the difference in the cost per point borne by the two clubs reached a level of 250% (Gedania was excluded from the comparison as it only played for one Plusliga season, winning the total of seven points). The difference in the average number of points won by the strongest and the weakest club (excluding Gedania) was about 23 points (around 120%). The diversity in average annual number of points among volleyball clubs is high and comparable to that of football.

Table 9. Volleyball – the average cost of securing one point (million PLN) versus the average annual number of points (PT)

No.	Club name	Average cost per point [PLN]	Average annual number of points [PT]
1.	KPS Skra Bełchatów	0.303	42.60
2.	Gedania	0.274	7.00
3.	Asseco Resovia	0.231	30.57
4.	KS Jastrzębski Węgiel	0.229	33.91
5.	ZAKSA Kędzierzyn-Koźle	0.179	32.73
6.	Piłka Siatkowa AZS – UWM	0.171	28.73
7.	Akademicki Związek Sportowy PW	0.170	19.38
8.	Płomień Sosnowiec	0.154	20.50
9.	KS AZS Częstochowa	0.122	34.73
10.	Trefl Gdańsk ³		

Source: own work.

³ no data

Among the speedway clubs, Unia Tarnów bore the highest average costs per point (PLN 0.852 million/point), whereas Speedway Stal Rzeszów bore the lowest (PLN 0.248 million/point). The difference in costs between the two clubs came to around 350%. Interestingly, the clubs with the greatest average costs per point (Unia Tarnów, Żużlowy Klub Sportowy Polonia Bydgoszcz) ranked low on the average annual points list (seventh and fifth out of eight clubs in the Speedway Ekstraliga, respectively).

Table 10. Speedway – the average cost of securing one point (million PLN) versus the average annual number of points (PT)

No.	Club name	Average cost per point [PLN]	Average annual number of points [PT]
1.	Unia Tarnów Żużlowa	0.852	15.00
2.	ŻKS Polonia Bydgoszcz	0.717	17.56
3.	Zielonogórski Klub Żużlowy	0.425	16.56
4.	Wrocławskie Towarzystwo Sportowe	0.395	18.82
5.	CKM Włókniarz	0.364	19.27
6.	KS Toruń Unibax	0.355	24.27
7.	Unia Leszno	0.303	21.73
8.	Speedway Stal Rzeszów	0.248	14.25

Source: own work.

4. SUMMARY AND CONCLUSIONS:

The calculations presented in this chapter suggest:

1. Great diversification of sports achievements among the studied clubs.
2. Unstable level of sports achievements in the case of the majority of the clubs discussed.
3. Great diversification among the top-level clubs regarding the outlay on the purchase of the rights to professional player contracts (football clubs).
4. Strong correlation between the sports results and the club's expenditure on player transfers (football clubs).
5. Great diversification of costs borne by the clubs on order to secure one point at top-level events (all disciplines).
6. Small diversification with reference to the average annual number of points among the clubs representing each discipline.
7. A weak correlation between the outlay on and the number of points won at the matches – high costs incurred by certain clubs did not directly translate into high results.

The results obtained suggest a number of dysfunctions in the management of professional sports clubs at the strategic and operational level. The precise identification of the dysfunctions seems to be achievable through qualitative research, including interviews with the owners and board members of the clubs in question.

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