

# A bright spot for a small league: social media performance in a football league without a COVID-19 lockdown

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**A Bright Spot for a Small League: Social Media Performance in a Football League  
without a COVID-19 Lockdown**

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**A Bright Spot for a Small League: Social Media Performance in a Football League  
without a COVID-19 Lockdown**

**Research question:** Pull effects in attention from smaller leagues towards bigger leagues have been under discussion. Nevertheless, causal empirical evidence on such attention interception is non-existent, and the suspension of sport leagues during the COVID-19 lockdown provides a perfect context for examination. The purpose of this study is to test whether the fan interest towards smaller leagues suffers from the presence of bigger leagues.

**Research methods:** While COVID-19 suspended top professional football worldwide, the Belarus league remained active. We used daily follower statistics (Facebook, Twitter, Instagram, Youtube) three month before, during, and three months after the lockdown. Since we have these statistics for Belarus clubs as well as for 847 lockdown-affected football clubs (48 first division leagues,  $N_{\max}=142,139$ ), we use a difference-in-differences approach to estimate the effect of the shock caused by the lockdown.

**Results and Findings:** Results indicate an increase in social media attention (throughout all social media channels) for Belarus clubs after the worldwide lockdown. A decrease was then observed after the revitalization of worldwide professional football leagues. The growth rates slowed down to an almost before COVID-19 level after the restart of other leagues.

**Implications:** First, keeping a league open during a pandemic boosts consumer/fan attention, which may lead league organizers and club managers to maintain a league open longer than advised by national health authorities. Second, since bigger leagues seem to pull of attention from smaller leagues, they could compensate the smaller leagues (financially or non-financial) for the loss of fan interest.

**Keywords:** COVID-19; lockdown; football leagues; compensation; sport fans.

**A Bright Spot for a Small League: Social Media Performance of Belarus Clubs during  
Worldwide COVID-19 Football Lockdown**

**Introduction**

Over the past decades, the attention gap between big and small football leagues has considerably grown. This progress has its roots in an increasing mobility of star players (e.g. Bosman rule, European Union, monetary union) and concentration of money via new international competitions and TV-contracts (e.g. Champions League, Europa League) in the late 1990s (Ericson, 2000; Hoehn & Szymanski, 1999; Vrooman, 2007). As a result, the increased media reach attracted external investors especially to the leagues already successful at that time,<sup>1</sup> which led to a decline in international competitive balance and a further concentration of star players and fan attention towards big leagues (Szymanski & Késenne, 2004). Consequently, the gap in attractiveness between small professional football leagues and top leagues has widened over the years (Solberg & Turner, 2010).

Moreover, social media communication and online live streaming further concentrated the attention towards star athletes<sup>2</sup> and their big-league clubs (Kringstad et al., 2018; Solberg & Mehus, 2014). This has contributed to a rise in fans' followership of their favourite teams and athletes on social media platforms (Filo et al., 2015), which in return deepens the bonding between fans and their team and league (Lock et al., 2014). According to social identity theory (Tajfel, 1981), this identification (i.e. sense of membership to a social group) satisfies fans' desire for community belonging as it fosters the connection to other fans, and often contributes to shape their future behaviours (Popp & Woratschek, 2016). However, identification with a team or league might change if utility derived from the social group decreases. In this case, some fans will likely search for teams/leagues which better satisfy their needs, and might be

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<sup>1</sup> Like a 'Matthew effect', by which "the rich get richer at a rate that makes the poor become relatively poorer" (Merton, 1968, p.62).

<sup>2</sup> Social media platforms can help the stars with self-marketing and thus also increases the attention towards their clubs and leagues (Doyle et al., 2020; Su et al., 2020)

followed by more fans who anticipate an identification with the new team through the decision of the “first movers” (“bandwagon effect”, Brown & Link, 2008; Kirkwood et al., 2019; Serazio, 2012).

While past literature has already discussed topics related to fandom and international competitive balance (e.g. Ericson, 2000; Hoehn & Szymanski, 1999; Neale, 1964; Rocaboy, 2017; Szymanski & Késenne, 2004), no empirical research has yet shown causal evidence of the negative effects of big leagues on fan followership of small leagues. So far, research has only investigated attention pull-effects in football. Kringstad et al. (2018) showed that domestic stadium attendance in a small league was negatively affected by live broadcasting from international big leagues. In addition, Solberg and Mehus (2014) showed that stadium attendance had fallen in a small league after the availability of live broadcasts. In contrast, Nielsen et al. (2019) found no statistically significant reduction in stadium attendance in Denmark, when domestic games overlapped with games from the English Premier League. Furthermore, Wallrafen, Pawlowski, and Deutscher (2019, 2020) showed that games from lower national leagues face less fan/spectator attention when overlapping with games from higher national leagues. Based on these few (mostly correlation based) studies with contradictory results, there is still an empirical and causal lag on the topic and a need for stronger evidence about a potential pull of fan attention away from smaller leagues by big leagues.

In order to test whether the attention of fans is indeed partially redirected from smaller leagues to bigger leagues, we use a quasi-experimental setting offered by the COVID-19 pandemic. From late March to early May, all top leagues were suspended worldwide. The ‘*Wyschejschaja Liha*’ in Belarus was the only league remaining active during the lockdown. As a proxy of fan interest, we gathered daily data on clubs’ official social media profiles and estimated the average changes in number of social media followers of Belarus clubs compared

to 847 worldwide first divisions clubs before and during, during and after, as well as before and after the lockdown. The purpose of this study is to present insight into the debate by examining whether fan attention towards smaller leagues suffer from the presence of bigger leagues.

### **Theoretical framework**

#### **Professional team sports and fans' social identity during a crisis**

In early 2020, COVID-19 interrupted everyday life around the world. To prevent further spread of the virus, lockdowns, quarantines, and other restrictions were put in place worldwide. Like many other areas of life, these restrictions strongly affected professional sports and in March 2020, sports leagues stopped almost completely (Mather, 2020). Besides the impact on athletes, clubs, and sponsors, this shutdown took away an important part of fans' lives, given that team games are intertwined with their identity, and deeply woven into their daily structure and routines (Lock & Funk, 2016; Stone, 2007).

Past research has shown that loyalty to sports clubs is mainly connected to fans' self-image and a desire for community belonging (e.g. Heere, James, et al., 2011; Tapp, 2004). Sports fans draw emotional energy from group solidarity and a shared identity that is expressed through symbols and rituals (Cottingham, 2012; Hedlund et al., 2020). When the COVID-19-related restrictions interrupted their routine by stopping all live events (i.e. the core product of professional sports; Greenwood et al., 2006), fans lost an important part of their lives (Mastromartino et al, 2020). The role of being a fan of a team implies certain behaviours such as attending games, and being prevented from doing so may affect the salience of that role in one's self-identity (Biscaia et al., 2018).

As noted by Lock et al. (2014), fans obtain emotional significance and value from their group (i.e. team) membership as this often reflects positively on their self-concept. The identification with teams can also enhance social well-being (Inoue et al., 2015) as it fosters the connection to other fans. However, if social connections with other team fans vanish and team

identification benefits stagnate due to the absence of team games, fans might be motivated to search for new identity-establishing groups to maintain their emotional energy and fulfil themselves (Wann, 2006).

Social distancing and global lockdowns during the COVID-19 outbreak increased the amount of time individuals spend communicating via social media by 21 % (Watson, 2020). Past research has shown that fans attest to their membership in a fan community by following a team via social media (Hollenbeck & Kaikati, 2012). By communicating online with other fans, they engage in fan communities and thus build team identification (Gibbons & Dixon, 2010). Leagues that maintained their competitions and could be followed through social media may have helped fans fill the void left by their own teams' lack of competition. While almost all professional team sports stopped, Belarus has never shut down professional football. Given that temporary social connections resulting from team identification can also lead to social and psychological health benefits (Wann, 2006; Wann & James, 2019), one may argue they gave football fans around the world the chance to have live sports events in their everyday life and experience solidarity in a new identity-establishing group.

According to social identity theory (SIT), social groups can be conceptualized as “a collection of individuals who perceive themselves to be members of the same social category, share some emotional involvement in this common definition of themselves, and achieve some degree of social consensus about the evaluation of their group and of their membership of it” (Tajfel & Turner, 1979). Common features of social groups such as rituals, history, traditions, moral responsibility, and shared consciousness are also true for fan communities (Hedlund et al., 2020; Heere, Walker, et al., 2011), making SIT an important theory to study sports fans and their relationships with teams (Heere, James, et al., 2011; Heere, Walker, et al., 2011; Lock & Heere, 2017; Sangwon et al., 2019). The identification with a type of sport can be as important as the identification with a single team, and thus fans might be open to identifying with more

than one team or league (Roccas & Brewer, 2002). To perceive this shared identity, fans must first categorize themselves as part of a group (Heere, Walker, et al., 2011). This process of perceiving a number of people (including oneself) as a group in the first place is described by self-categorization theory (SCT) (Turner et al., 1987). Combined, SIT and SCT denote the social identity approach (Lock & Heere, 2017) and provide an important theoretical lens to examine whether the COVID-19 pandemic has influenced fans' redirection of interest towards sport leagues that were not suspended such as the Belarus football league.

### **League size, competitive balance, and fan attention**

The COVID-19-related shutdowns did not only influence fans, they also had an impact on professional sports leagues and athletes around the world (Drewes et al., 2020). Since this pandemic created an unprecedented situation, it is still early to measure long-term consequences. However, football clubs had to endure other crisis before. The Great Depression impacted Britain strongly in the early 1930s, but only very few football clubs were affected permanently. The same is true for the 'Thatcher Recession' in the early 1980s and the global financial crisis of 2008 (Humphreys, 2010; Szymanski, 2010). These examples show that although consumption and total wages correlate with league attendance, most football clubs can financially survive during an (inter)national crisis. This is likely due to the strong emotional connection that many sports fans feel towards their clubs and towards their favourite sports in general. According to Szymanski (2010), another important factor for the past survival of clubs during crisis was the willingness to support each other. Better off clubs as well as professional sports associations lent money to competitors in order to ensure their survival, and thus the survival of the leagues. This willingness to support each other is not only important within a league but also between leagues. Past literature argues that a devaluation and/or neglectance of smaller leagues might induce negative spill-overs to the football system in three ways (Hoehn



& Szymanski, 1999). First, bigger clubs depend on new talent, which is often discovered by smaller clubs. Therefore, incentives by bigger clubs to stabilize small clubs or increasing the pool of talents on the market and reduce talent acquisition prices may be beneficial (Ericson, 2000). Similarly, specific regulations to prevent bigger clubs/leagues to attract talent from smaller leagues (e.g. offering athletes higher salaries, more chances of becoming a professional, better family life conditions) without compensating smaller clubs for their initial investments, will likely minimize the incentives to invest in talent development (Ericson, 2000; Szymanski & Késenne, 2004). To compensate smaller clubs for their investments in youth development, FIFA has already installed the *Regulations on the Status and Transfer of Players* to (Prinz & Weimar, 2018).

Second, according to the ‘Luis Schmeling Paradoxon’, a low competitive balance within international championships might decrease overall attractiveness of international games and thus overall revenues might shrink. Despite this, leagues continue to behave non-cooperatively (Neale, 1964; Rocaboy, 2017), which has led UEFA to introduce sharing mechanisms of TV-rights (depending on sporting performance in international championships) to help close the gap between small and big leagues (Gerrard, 2000; Peeters & Szymanski, 2014). Third, weakly committed football fans from countries with small leagues are most likely to follow big-leagues partially or even exclusively (Kringstad et al., 2018; Solberg & Mehus, 2014) because of their prominence and perceived quality. Bigger leagues might pull the attention from fans of smaller leagues, which in turn become even smaller and less attractive (Gerrard, 2000). When part of the fans direct their attention to other clubs, their social group gets destabilised and some turn to new identity-establishing fan groups (Brown & Link, 2008; Serazio, 2012). The dilemma in this regard is rooted in the partially public good character (common goods) of fan attention (Gerrard, 1999). That is, the ‘access’ to fan attention cannot be restricted, and thus bigger leagues intercept football demand from smaller leagues. However, pulling fan attention away

without compensating the smaller leagues for their basic investments into the general football interest (e.g. facilities, football activities for children) likely decreases fairness in competition even further.

It seems essential that clubs and leagues work as a community to ensure the continued existence of professional sports. Past research has shown that leagues that are dominated by only a small number of clubs are less attractive (Ramchandani et al., 2018). By ensuring that league teams have comparable sporting strength, leagues create competitive balance. This balance, in turn, leads to a higher uncertainty of outcome and thus increased fan interest in all teams (Koenigstorfer et al., 2010; Soebbing, 2008) as well as a higher willingness-to-pay (Nalbantis et al., 2017). Despite the strong evidence for its importance, competitive balance seems to be declining over time (Plumley et al., 2018; Ramchandani et al., 2018) and the gap between big and small football leagues is still growing considerably due to financial advantages created by new international competitions and TV-contracts (Ericson, 2000; Hoehn & Szymanski, 1999; Vrooman, 2007) as well as the increasing mobility of star players.

While past research has shown that players and/or coaches are among the strongest motivations to choose a new team in mid-level leagues (Greenwood et al., 2006), star athletes play an especially important role for big teams (Hoegel et al., 2014b). Contrary to the ‘local heroes’ of smaller leagues, superstars attract transregional attention (Brandes et al., 2008; Hasaan et al., 2019). In addition to compensating poor team performance, they prevent existing fans from switching to a competitor while at the same time attracting fans from competing teams (Hoegel et al., 2014a). The growing demand for social media communications (Stavros et al., 2014) boosts the attention towards stars and big-league clubs even further (Kringstad et al., 2018; Solberg & Mehus, 2014). This increased media attention for successful leagues in turn attracts external investors (Matthew principle) and amplifies competitive imbalance and

an additional concentration of star players and fan attention towards big leagues (Szymanski & Késenne, 2004).

Superstar athletes and other prominent personalities (e.g. coaches) ensure that big leagues not only remain big but also pull fans from smaller leagues, which increases the gap in attractiveness between small and top leagues (Solberg & Turner, 2010). Although pull effects in attention from smaller leagues towards bigger leagues have been in discussion for some time (Kringstad et al., 2018; Nielsen et al., 2019; Solberg & Mehus, 2014; Wallrafen, Pawlowski & Deutscher, 2019), causal empirical evidence on such attention interception is still non-existent. In the current study, we examine whether smaller leagues suffer from the dominating presence of bigger leagues, and the continued operation of the Belarus football league during the COVID-19 pandemic provided the context for it.

## **Empirical Analysis**

### **Quasi-experimental setting**

To examine the causal impact of big leagues on attention towards small leagues, an experimental setting is needed in which only a small league operates while bigger leagues stop operating. In a next step, this small league would open simultaneously to other (bigger) leagues. While such experiments are usually not possible due to competition and football regulations, we make use of a natural (quasi)-experimental setting surrounding the COVID-19 pandemic. Between 24<sup>th</sup> March 2020 and 7<sup>th</sup> May 2020, the top 48 first division professional football leagues worldwide<sup>3</sup> were cancelled or suspended (see table 1 for an overview). The selection of leagues contains 867 first division clubs. The last league to stop was in Australia on 23<sup>th</sup> March 2020 and the first ones to restart were in South Korea (5<sup>th</sup> May 2020) and Germany (16<sup>th</sup> May 2020). Only Belarus continued their first division league amid the COVID-19 pandemic

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<sup>3</sup> We ranked the Top leagues by the transfermarkt.de league (roster) values with a threshold of 100 Million in January 2019 (start of the web crawling process).

effects on the population.<sup>4</sup> Based on this development, we were able to compare the interest in small league football (Belarus) before, during, and after this lockdown to all suspended leagues.

[Insert Table 1]

## Data

A usual proxy for fan interest into first division football in past studies is attendance or TV viewer data (e.g. Baimbridge et al., 1996; Kringstad et al., 2018). However, attendance data is (1) not always very precise in small leagues, (2) there were no spectators in the suspended leagues, and (3) we would not see additional demand by other countries due to travel restrictions during the COVID-19 pandemic. Therefore, we used data on social media performance, since those can be used to observe fan dynamics during the lockdown. As main performance indicator we use the number of followers (fans subscribed to a club's channel page, at Facebook formerly known as 'likes') of a club's Facebook, Twitter, Instagram, and YouTube channel as previously applied by past sports economic research (Feddersen et al., 2017; Watanabe et al., 2015; Weimar et al., 2020). These statistics represent the accumulated/current number of subscribed users at the day of observation. Past research already classified follower information as a measurement of popularity and/or a proxy of existent consumption capital among fans (Feddersen et al., 2017; Prinz et al., 2012; Watanabe et al., 2015), which makes the measurement an adequate proxy for fan attention. Note that not every club in the sample runs a channel on every platform (N=867 clubs, 799 Facebook, 695 Twitter, 805 Instagram, 638 YouTube). In order to generate a comparable time span before and after the lockdown, we used a three-month threshold (determined by the last game before the lockdown on 24<sup>th</sup> March 2020 and the first game after the lockdown on 8<sup>th</sup> May 2020; see table 1). Therefore, we define three periods: before lockdown (23<sup>th</sup> December 2019 to 23<sup>th</sup> March 2020), during lockdown (24<sup>th</sup> March 2020 to 7<sup>th</sup> May 2020), and after lockdown (8<sup>th</sup> May 2020 to 7<sup>th</sup> August 2020).

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<sup>4</sup> Until 18 August 2020, Belarus reported 69,589 COVID-19 cases and thus ranked 40 out of 210 countries, source: European Centre for Disease Prevention and Control, <https://www.ecdc.europa.eu>.

As dependent variable we defined the daily growth rates in followers for the observed team between day  $t-1$  and day  $t$ . The growth rates  $\Delta$ FACEBOOK,  $\Delta$ TWITTER,  $\Delta$ INSTAGRAM, AND  $\Delta$ YOUTUBE are calculated by the absolute first difference between  $t$  and  $t-1$  divided by the absolute followers in  $t-1$ . We used this instead of the absolute number of followers due to less efficient estimates because of missing stationarity.

Besides the main information, we also gathered data on the nationwide spread of COVID-19, since these circumstances changed the daily social life and thus online social media interactions might have been affected, too. Therefore, we included the daily reported new COVID-19 CASES on country level (divided by 10,000 for interpreting purposes later in the regression estimations). This information was obtained from the European Center for Disease Prevention and Control (ECDC, 2020). To control for unobserved heterogeneity associated with the clubs and time, we generated fixed effect dummies of CLUB, WEEKDAY, and MONTH.

### **Descriptive statistics**

Tables 2 and 3 show the variable descriptions and descriptive statistics. While  $\Delta$  variables indicate metric growth rates, BELARUS and LOCKDOWN are dummy variables necessary for the empirical modelling in the next step indicating the identification of the treatment group (Belarus) and the treatment period. According to table 3, daily Youtube views are growing fastest (on average 0.08%), while Instagram growth more than doubled on average (+0.07%) compared to Twitter (+0,03%) and Facebook (0.02%) over the whole period of observation. The maximum and minimum are restricted to 5%. We corrected for extreme outliers, by restricting the daily growth rates to 5%, which seems a not too restrictive threshold given that the six-sigma-threshold (mean + 6\*standard deviation) for daily growth rates before the lockdown were 1.4% (Facebook), 1.2% (Twitter), 1.7% (Instagram), and 2.4% (YouTube). Moreover, we only lost 374 observations out of 649,220 (Facebook, Twitter, Instagram, and YouTube combined). Regarding the spread of COVID-19, we observed an average of 1,621

new daily cases of COVID-19 with a maximum of 78,427 (USA). Looking at Belarus, the first cases were reported on 28 February 2020, with an increase up to 973 on 30 April 2020, and an average of approximately 100 at the beginning of August 2020.

[Insert Table 2]

[Insert Table 3]

As depicted by Figure 1, there is a clear and visible increase in daily growth rates among Belarus clubs compared to all other clubs. In contrast to Belarus clubs, social media growth rates of lockdown-leagues declined during the lockdown (as indicated by the two vertical lines).

[Insert Figure 1]

### **Empirical model**

Given that we observed both non-lockdown clubs (Belarus) and the lockdown clubs before, during and after the lockdown combined with a club panel structure, we apply a club fixed effect (FE) difference-in-differences estimation (DID). A DID-estimation is an ordinary linear regression with an interaction between a treatment-group and a treatment-time variable. Consequently, a DID offers the advantage of eliminating unobserved heterogeneity affecting Belarus clubs as well as lockdown clubs (e.g. general economy, worldwide cultural trends, changes in the FIFA system). Moreover, having panel data at hand further reduces unobserved heterogeneity (e.g. budget, location, structure, size, history) associated with the clubs. As we are interested in the perspective of the Belarus league clubs, we defined the Belarus league as the treated group (BELARUS). When incorporating an interaction effect between the treatment group BELARUS and the treatment time LOCKDOWN, then the unstandardized beta coefficient of this interaction reflects the treatment effect. The most crucial assumption of a DID estimation is the “parallel path/trend” assumption. According to this requirement, estimations from DID estimations are efficient, if the distribution before and after are relatively

similar. Given the large number of control clubs, Figure 1 shows the average growth rates of Belarus and the control clubs, which are similar before and after the lockdown. Therefore, we see little concerns that the estimations might be strongly inefficient due to non-parallel distributions.

A DID model does not necessarily need covariates to estimate the treatment effect. However, the COVID-19 pandemic hit countries in a different way, which is why we test one model with and another without the COVID-19 case information for every of the four social media channels. All models contain weekday, month, and club fixed effects (least square dummy variable approach). Due to the use of club fixed effects, other club invariant characteristics potentially linked to social media performance have been omitted (e.g. country, historical age, balance sheet information). All estimations are done with a robust heteroskedasticity-consistent correction. The regressions models are specified as follows:

$$(1) \Delta\text{FACEBOOK}_{it}|\Delta\text{TWITTER}_{it}|\Delta\text{INSTAGRAM}_{it}|\Delta\text{YOUTUBE}_{it} = \beta_0 + \beta_1*\text{BELARUS} + \beta_2*\text{LOCKDOWN} + \beta_3*\text{BELARUS}*\text{LOCKDOWN} + \beta_{4-9}*\text{WEEKDAY}_{it} + \beta_{10-19}*\text{MONTH}_{it} + \beta_{20-887}*\text{CLUB}_{ij\text{tli}} + u_{ij\text{tli}}$$

$$(2) \Delta\text{FACEBOOK}_{it}|\Delta\text{TWITTER}_{it}|\Delta\text{INSTAGRAM}_{it}|\Delta\text{YOUTUBE}_{it} = \beta_0 + \beta_1*\text{BELARUS} + \beta_2*\text{LOCKDOWN} + \beta_3*\text{BELARUS}*\text{LOCKDOWN} + \beta_4*\text{COVID-19 CASE} + \beta_5.*_{10}*\text{WEEKDAY}_{it} + \beta_{11-20}*\text{MONTH}_{it} + \beta_{21-888}*\text{CLUB}_{ij\text{tli}} + u_{ij\text{tli}}$$

Model (1) and Model (2) are estimated for three comparison scenarios: before lockdown vs. during lockdown, before lockdown vs. after lockdown, and during lockdown vs. after lockdown. As a result, we present eight estimations for every comparison scenario.

## Results

### *Before lockdown vs. during lockdown*

First, we examined the effect of the lockdown in other countries on the interest towards Belarus clubs. Therefore, we start with a comparison of the social media performance before and during the lockdown (Table 4). Since not every club runs channels on all four social media platforms, the observations range from 104,542 (Facebook) to 82,219 (YouTube). Given the large number of exogenous determinants of online social media performance, a variance explanation ( $R^2$ ) between 26.5% ( $\Delta$ YouTube) and 17,8% ( $\Delta$ Twitter) seems high. As indicated by the statistical significance ( $p < 0.001$ ) of LOCKDOWN, all football clubs worldwide faced a decline in social media follower and views. Followers on Instagram unsubscribed twice as often as Twitter followers and almost four times as often as Facebook followers. With respect to BELARUS, football clubs showed on average a smaller growth rate on Facebook and Twitter, similar dynamics on Instagram, and even a higher interaction/view rate on YouTube. Yet, the most interesting part of the analysis is given by the interaction effect LOCKDOWN#BELARUS, which is also called the treatment effect. As shown in Figure 1, Belarus football clubs faced a strong and statistically significant ( $p < 0.001$ ) daily interest boost through all channels. The strongest daily increases were observed on Twitter with an average additional growth rate of 0.470% (Model 4). The impact of the lockdown on Facebook and Instagram followers seemed similar with Facebook followers rising by 0.262% (Model 2) and Instagram followers by 0.251% (Model 6). The impact on YouTube views was the smallest, with an increase of 0.113% (Model 8). Controlling for the precise COVID-19 cases only changed the estimations of the other explanatory variables in marginal way. Importantly, the COVID-19 cases were negatively correlated with the growth rates. More precisely, every 1,000 cases lead to a decrease in growth rates by 0.005% of Facebook and Instagram followers



( $p < 0.001$ ). With respect to YouTube and Twitter, the growth rates fell by 0.007% and 0.003%, however, the statistical significance level was much higher (~2%).

[Insert Table 4]

Given the high number of observations, finding statistical significance seems not very surprising. Therefore, we assessed the effect size of the lockdown effect by comparing the average mean before the lockdown with the mean estimations from model 2, 4, 6, and 8. We also express the mean effect in standard deviations to generate an even more detailed view on the impact. According to the calculations shown in Table 5, the lockdown affected the daily follower rates on Twitter most. In this regard, the average daily increase was 12 times higher, which reflects an additional daily increase by 2.2 standard deviations (SD) from the before lockdown time. Looking at the impact on Facebook dynamics, followers of Belarus clubs have risen by less than a half compared to Twitter (5 times higher = 1 SD). While a daily incline by in average 2.53 times (0.85 SD) on Instagram channels has found the third biggest effect, YouTube views increased less compared to the other channels but still high with an increase of 1.22 times (0.52 SD).

[Insert Table 5]

*Before lockdown vs. after lockdown*

Besides the core effects from the treatment (non-lockdown to lockdown), we further examined the effects after a revitalization of international football. Therefore, table 6 presents the results of DID estimations comparing the pre-lockdown period with the after-lockdown. Except for Twitter dynamics, the Belarus clubs, indeed, faced a higher daily interest/demand towards their club in the ex post time. Thus, the increased attraction of interested fans during the lockdown also had positive effects afterwards. In contrast to the mean effects given in table 3, the coefficients of the interaction effects are visibly smaller. The non-significant results for LOCKDOWN also show that clubs worldwide turned back to a pre-pandemic user behaviour.

[Insert Table 6]

Similar to table 5, we also calculated the effect size for the post-lockdown period (table 7). Thus, the mean growth rates on Twitter, Instagram and Youtube were smaller compared to the pre-lockdown period, although the growth on these platform were larger than clubs outside Belarus. Opposite to the effects during the lockdown, user subscriptions on Twitter were smallest, while Facebook follower still increased by 1.25 times compared to the period before the lockdown.

[Insert Table 7]

*Before lockdown vs. after lockdown*

As it could be drawn from table 8, the results for the second shock (reopening the leagues) indicate a clear decline in daily social media growth rates among Belarus clubs. While the Twitter follower growth rates fell most after the reopening (-0.440%), Facebook (-0.203%) and Instagram (-0.215%) growth rates decreased at a similar level. The fall in YouTube follower growth rates (-0.174%) was the smallest. These results suggest that a revitalization of other leagues (including big leagues) pulled attention from the small Belarus league. Since the effect sizes can be computed by a subtraction of table 7 from table 5, we do not report a further effect size table.

[Insert Table 8]

### **Discussion**

While most of the top professional football leagues worldwide were suspended because of the COVID-19 pandemic, the Belarus league remained active. This has provided a unique opportunity to examine whether fan interest towards smaller leagues suffers from the presence of bigger leagues. We grounded our empirical investigation on social identity theory premise that group solidarity and shared identity resulting from following a team foster emotional

significance and value (Lock et al., 2014) and that even temporary identification with a team satisfies the fans' desire for community (Wann, 2006; Wann & James, 2019).

The results of the current study showed an additional interest towards Belarus football clubs during the worldwide football lockdown and a decrease after the reopening, supporting the idea that social identity is complex and individuals (i.e. sport fans) can be members of multiple social groups (Miller et al., 2009). This dynamic was visible throughout all channels. The increase in followers was largest on Twitter, followed by Facebook, Instagram, and YouTube. After the revitalization of international football, the interest toward Belarus clubs significantly decreased. Consequently, the increased attention and interest towards Belarus clubs seemed to be associated with Belarus being the only professional football league worldwide. These results align with previous studies suggesting that small leagues, indeed, suffer from the existence of bigger leagues (Kringstad et al., 2018; Solberg & Mehus, 2014; Wallrafen, Pawlowski & Deutscher, 2019), while also pointing out that football fans who are generally interested in football do not necessarily derive utility from one specific club only. That is, in the absence of their teams' games, fans seem to search for temporary social connections that help them be part of social groups aligned with their self-concept (Lock et al., 2012). As noted by Lock and Funk (2016), there are various groups to which sport fans may belong within a superordinate identity, and these multiple in-group identities play a complementary role in sport consumption. If a fan cannot nurture his/her identification with the team through followership of games (as it was the case during the lockdown), other related groups (leagues and clubs still operating; e.g. Belarus league clubs) seem to assume a pivotal importance for fans, shaping consumption behaviours and meeting their self-concept.

The results of our study also contribute to the current discussion whether general interest in football might suffer by bankruptcies and the dying of 'cult clubs' (induced by increasing financial pressure). According to our results, football fans seem to be flexible regarding their

sources of utility from football and might accept alternative sources of football or, as suggested by Roccas and Brewer (2002), they might at least identify with more than one club or league. Since one of the most important reasons for fans to choose a new club are players or coaches (Greenwood et al., 2006; Hoeghele et al., 2014a; 2014b), the death of a ‘cult club’ might hit fans less hard, if they can follow their favourite team member to another club. Hypothetically speaking, if only Belarus football would exist for a long period of time, all superstars would have to move to this league and thus the Belarus league would pick up the whole demand for live football.

Despite the strong impact of a non-lockdown, we could not track actual fan movement. More specifically, we could not check whether the additional followers were new Belarus followers or spill-over followers from other countries. Given the fact that followers during the COVID-19 pandemic rather decreased their engagement on social media worldwide (table 3, LOCKDOWN), we find the assumption of a within Belarus effect rather unlikely. It seems to be more likely that fans from around the world filled the void left by the shutdown of their ‘home league’ by turning to the Belarus league. Thus, even though we cannot present empirical evidence, we see a high probability of an international ‘attention migration’ as a cause behind the social media boost. This aligns with previous research on team identity threats that indicates that group identities are not stable and the importance of team identities can be impacted by threats like a team’s cross-country relocation (Wegner et al., 2020).

A positive social identity often depends on the perceived advantages of the in-group, but the meaning of these groups to the individuals evolves due to environmental changes (Delia & James, 2018). If fans lose the option to follow their team and be part of their in-group, they will likely seek to positively alter the group to keep the perceived advantages (Tajfel & Turner, 1979). As shown in the current study, this seems to have resulted in the temporary followership of Belarus league clubs during the COVID-19 shutdowns, as this attachment allowed fans to be

part of a superordinate group (Lock & Funk, 2016) of football fans. Since fans can identify with different teams (Roccas & Brewer, 2002), they attached themselves to a new group that promised to provide social identity benefits (Lock et al., 2012).

### **Implications**

The implications from our study results are twofold. First, maintaining a league open in a pandemic situation clearly generates positive attention spill-overs towards the open league. This shows that live games are critical to keep fans interested and that, as proposed by SIT (Tajfel, 1981), fans search for temporary social connections in order to obtain emotional significance and value when their usual groups are not available. From a health policy perspective, this might generate false incentives for league organizers and club managers to maintain the league open longer than advised by national health authorities. In order to prepare for possible future crisis, clubs should instead start to look for additional ways to create experiences and maintain group identity off-the-field (Majumdar & Naha, 2020; Popp & Woratschek, 2016). While there is a growing apprehension that social media is pivotal for all sport brands (Filo et al., 2015), the results of the current study suggest that clubs from small leagues would likely benefit from a social media strategy to build consumer demand and nurture relationships with existent fans. Since word-of-mouth (WOM) is a major part of online consumer interactions (Brown et al., 2007), fans might recommend their new in-groups and thereby increase the visibility of small leagues and their teams. Thus, especially smaller leagues should increase their investments in relationship marketing through social media (Abeza et al., 2015) and in high quality online platforms (Hur et al., 2011).

Second, bigger leagues seem to concentrate international demand and thus, negatively affect the interests towards smaller leagues. Within leagues, there are already mechanisms to share revenues for subsidizing/helping smaller clubs to survive (Lenten, 2008; Szymanski, & Késenne, 2004). On UEFA and FIFA level, only performance-based compensation mechanisms

exist (UEFA, 2020). Based on our results, we argue that bigger leagues could give (financial) aid to smaller leagues since these leagues also help to generate demand for international football by offering nationwide football opportunities. For instance, a young child in Belarus might only become a follower of the FC Barcelona if he/she has the opportunity to play football at younger age provided by Belarus authorities and/or football clubs. In addition, (financial) aid to smaller leagues can help maintain competitive balance, and thus a higher uncertainty of outcome, which in turn leads to an increased interest in all leagues.

Financial aid could be organized by an international trust that redistributes financial resources between financially strong and weak associations and/or teams of smaller leagues. Moreover, FIFA and UEFA could adjust their revenue sharing policies and/or introduce an additional social solidarity contribution mechanism (e. g. compensation tax), which redirects money to smaller leagues and/or associations. Besides financial solidarity, bigger clubs and associations might offer non-financial support such as sharing knowledge (e. g. coaching, sponsoring, scouting, employee education, club organization) or sharing network contacts (e. g. industry managers, capital lenders, politicians). Such innovations could lead to a higher visibility of smaller teams and leagues, and thus help attract the attention of new fans generating long-term mutual benefits.

Therefore, our results support the idea of revenue sharing (or another financial compensation) mechanism on UEFA and/or FIFA level decoupled from the performance in international championships or ‘countable’ talent development by stressing how other mechanism of support to smaller leagues could be provided to benefit all actors within the sport ecosystem.

### **Conclusions**

In summary, the current study has built on the suspension of most football leagues worldwide caused by the COVID-19 pandemic and examined if fan interest towards smaller

leagues suffers from the presence of bigger leagues. Our results indicate that the number of followers on social media platforms of Belarus clubs (only league without suspension) strongly increased during the lockdown. After the revitalization of international football, growth rates slowed down to a similar level than before the worldwide suspension of football. While the fan attention towards Belarus clubs increased most on Twitter (12.70 times higher), followers on Facebook channels increased on average 5.46 times compared to the before COVID-19 lockdown, Instagram by 2.54 times and YouTube by 1.25 times. The result from this large quasi-experiment showed that fans do search for temporary social connections when their usual groups disappear and there seems, indeed, to be a causal redirection of fan attention from smaller leagues to bigger leagues.

Although the COVID-19 setting is a unique setting, it also comes along with some drawbacks. First, the COVID-19 pandemic might be so unique in their way of changing people`s behaviour that the results might not be generalizable. Therefore, researchers should investigate fan behaviour of smaller and bigger leagues in more extent. Moreover, we could not control for the actual movements of followers, which is why we observed an increase in attention without identifying the origin of this increase. In this regard, future research could focus on the precise movement of fans on online social networks.

### References

- Abeza, G., O'Reilly, N., Séguin, B., & Nzindukiyimana, O. (2015). Social media scholarship in sport management research: A critical review. *Journal of Sport Management*, 29(6), 601-618.
- Baimbridge, M., Cameron, S., & Dawson, P. (1996). Satellite television and the demand for football: A whole new ball game?. *Scottish Journal of Political Economy*, 43(3), 317-333.

- Biscaia, B., Hedlund, D. P., Dickson, G., & Naylor, M. (2018). Conceptualising and measuring fan identity using stakeholder theory. *European Sport Management Quarterly*, 18(4), 459-481.
- Brandes, L., Franck, E., & Nüesch, S. (2008). Local heroes and superstars: An empirical analysis of star attraction in German soccer. *Journal of Sports Economics*, 9(3), 266-286.
- Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of Interactive Marketing*, 21(3), 2-20.
- Brown, D., & Link, C. R. (2008). Population and bandwagon effects on local team revenues in Major League Baseball. *Journal of Sports Economics*, 9(5), 470-487.
- Cottingham, M. D. (2012). Interaction ritual theory and sports fans: Emotion, symbols, and solidarity. *Sociology of Sport Journal*, 29(2), 168-185.
- Delia, E. B., & James, J. D. (2018). The meaning of team in team identification. *Sport Management Review*, 21(4), 416-429.
- Doyle, J. P., Su, Y., & Kunkel, T. (2020). Athlete branding via social media: Examining the factors influencing consumer engagement on Instagram. *European Sport Management Quarterly*.
- Drewes, M., Daumann, F., & Follert, F. (2020). Exploring the sports economic impact of COVID-19 on professional soccer. *Soccer & Society*.
- ECDC (2020). *COVID-19 pandemic*. European Centre for Disease Prevention and Control (ECDC). <https://www.ecdc.europa.eu/en/covid-19-pandemic>
- Ericson, T. (2000). The Bosman case: Effects of the abolition of the transfer fee. *Journal of Sports Economics*, 1(3), 203-218.



- Feddersen, A., Humphreys, B. R., & Soebbing, B. P. (2017). Sentiment bias and asset prices: Evidence from sports betting markets and social media. *Economic Inquiry*, 55(2), 1119-1129.
- Filo, K., Lock, D., & Karg, A. (2015). Sport and social media research: A review. *Sport management review*, 18(2), 166-181.
- Gerrard, B. (1999). Team sports as a free-market commodity. *New political economy*, 4(2), 273-278.
- Gerrard, B. (2000). Media ownership of pro sports teams: Who are the winners and losers?. *International Journal of Sports Marketing & Sponsorship*, 2(3), 199-219.
- Gibbons, T., & Dixon, K. (2010). 'Surf's up!': A call to take English soccer fan interactions on the internet more seriously. *Soccer & Society*, 11(5), 599-613.
- Greenwood, P. B., Kanters, M. A., & Casper, J. M. (2006). Sport fan team identification formation in mid-level professional sport. *European Sport Management Quarterly*, 6(3), 253-265.
- Hasaan, A., Biscaia, R., & Ross, S. (2019). Understanding athlete brand life cycle. *Sport in Society*.
- Hedlund, D., Biscaia, R., & Leal, M. C. (2020). Classifying sport consumers: From casual to tribal fans. In C. L. Wang (Ed.), *Handbook of Research on the Impact of Fandom in Society and Consumerism* (pp. 323-356). IGI Global.
- Heere, B., James, J., Yoshida, M., & Scremin, G. (2011). The effect of associated group identities on team identity. *Journal of Sport Management*, 25(6), 606-621.
- Heere, B., Walker, M., Yoshida, M., Ko, Y. J., Jordan, J. S., & James, J. D. (2011). Brand community development through associated communities: Grounding community measurement within social identity theory. *Journal of Marketing Theory and Practice*, 19(4), 407-422.

- Hoegel, D., L. Schmidt, S. L., & Torgler, B. (2014a). Superstars and disloyal football fans: Factors influencing attraction to competition. *Sport, Business and Management*, 4(4), 298-316.
- Hoegel, D. L., Schmidt, S. L., & Torgler, B. (2014b). Superstars as drivers of organizational identification: Empirical findings from professional soccer. *Psychology & Marketing*, 31(9), 736-757.
- Hoehn, T., & Szymanski, S. (1999). The Americanization of European football. *Economic Policy*, 14(28), 204-240.
- Hollenbeck, C. R., & Kaikati, A. M. (2012). Consumers' use of brands to reflect their actual and ideal selves on Facebook. *International Journal of Research in Marketing*, 29(4), 395-405.
- Humphreys B.R. (2010). The impact of the global financial crisis on sport in North America. In: S. Butenko, J. Gil-Lafuente, & P. Pardalos (Eds), *Optimal Strategies in Sports Economics and Management* (39-57). Springer.
- Hur, Y., Ko, Y. J., & Valacich, J. (2011). A structural model of the relationships between sport website quality, e-satisfaction, and e-loyalty. *Journal of Sport Management*, 25(5), 458-473.
- Inoue, Y., Funk, D. C., Wann, D. L., Yoshida, M., & Nakazawa, M. (2015). Team identification and postdisaster social well-being: The mediating role of social support. *Group Dynamics: Theory, Research, and Practice*, 19(1), 31-44.
- Koenigstorfer, J., Groeppel-Klein, A., & Kunkel, T. (2010). The attractiveness of national and international football leagues: Perspectives of fans of “star clubs” and “underdogs”. *European Sport Management Quarterly*, 10(2), 127-163.

- Kringstad, M., Solberg, H. A., & Jakobsen, T. G. (2018). Does live broadcasting reduce stadium attendance? The case of Norwegian football. *Sport, Business and Management: An International Journal*, 8(1), 67-81.
- Lenten, L. J. (2008). Unbalanced schedules and the estimation of competitive balance in the Scottish Premier League. *Scottish Journal of Political Economy*, 55(4), 488-508.
- Lock, D. J., & Funk, D. C. (2016). The multiple in-group identity framework. *Sport Management Review*, 19(2), 85-96.
- Lock, D., Funk, D. C., Doyle, J. P., & McDonald, H. (2014). Examining the longitudinal structure, stability, and dimensional interrelationships of team identification. *Journal of Sport Management*, 28(2), 119-135.
- Lock, D. & Heere, B. (2017). Identity crisis: A theoretical analysis of 'team identification' research. *European Sport Management Quarterly*, 17(4), 413-435.
- Lock, D., Taylor, T., Funk, D., & Darcy, S. (2012). Exploring the development of team identification. *Journal of Sport Management*, 26(4), 283-294.
- Majumdar, B., & Naha, S. (2020). Live sport during the COVID-19 crisis: Fans as creative broadcasters, *Sport in Society*, 23(7),
- Mastromartino, B., Ross, W. J., Wear, H., & Naraine, M. L. (2020). Thinking outside the 'box': A discussion of sports fans, teams, and the environment in the context of COVID-19. *Sport in Society*.
- Mather, V. (2020, March 13). Updates on sports canceled by coronavirus. *The New York Times*.  
<https://www.nytimes.com/2020/03/13/sports/sports-canceled-coronavirus.html>
- Merton, R. K. (1968). The Matthew effect in science: The reward and communication systems of science are considered. *Science*, 159(3810), 56-63.
- Miller, K. P., Brewer, M. B., & Arbuckle, N. L. (2009). Social identity complexity: Its correlates and antecedents. *Group Processes & Intergroup Relations*, 12(1), 79-94.

- Nalbantis, G., Pawlowski, T., & Coates, D. (2017). The fans' perception of competitive balance and its impact on willingness-to-pay for a single game. *Journal of Sports Economics*, 18(5), 479-505.
- Neale, W. C. (1964). The peculiar economics of professional sports. *The quarterly journal of economics*, 78(1), 1-14.
- Nielsen, C. G., Storm, R. K., & Jakobsen, T. G. (2019). The impact of English Premier League broadcasts on Danish spectator demand: A small league perspective. *Journal of Business Economics*, 89(6), 633-653.
- Peeters, T., & Szymanski, S. (2014). Financial fair play in European football. *Economic Policy*, 29(78), 343-390.
- Popp, B., & Woratschek, H. (2016). Introducing branded communities in sport for building strong brand relations in social media. *Sport Management Review*, 19(2) 183-197.
- Plumley, D., Ramchandani, G., & Wilson, R. (2018). Mind the gap: an analysis of competitive balance in the English football league system. *International Journal of Sport Management and Marketing*, 18(5), 357-375.
- Prinz, J., & Weimar, D. (2018). The golden generation: The personnel economics of youth recruitment in European professional soccer. In N. Longley (Ed.), *Personnel Economics in Sport* (pp. 47-72). Edward Elgar.
- Prinz, J., Weimar, D., & Deutscher, C. (2012). Popularity kills the Talentstar? Einflussfaktoren auf Superstarghälter in der NBA. *Journal of Business Economics*, 82(7-8), 789-806.
- Ramchandani, G., Plumley, D., Boyes, S., & Wilson, R. (2018). A longitudinal and comparative analysis of competitive balance in five European football leagues. *Team Performance Management*, 24 (5/6), 265-282.
- Rocaboy, Y. (2017). Competition among national football leagues. Does it exist? Should we regulate?. *Scottish Journal of Political Economy*, 64(1), 88-114.

- Roccas, S., & Brewer, M. B. (2002). Social identity complexity. *Personality and social psychology review*, 6(2), 88-106.
- Sangwon N., Su, Y., & Kunkel, T. (2019). Do not bet on your favourite football team: The influence of fan identity-based biases and sport context knowledge on game prediction accuracy. *European Sport Management Quarterly*, 19(3), 396-418.
- Serazio, M. (2013). The elementary forms of sports fandom: A Durkheimian exploration of team myths, kinship, and totemic rituals. *Communication & Sport*, 1(4), 303-325.
- Soebbing, B. P. (2008). Competitive balance and attendance in major league baseball: An empirical test of the uncertainty of outcome hypothesis. *International Journal of Sport Finance*, 3(2). 119-126
- Solberg, H. A., & Mehus, I. (2014). The challenge of attracting football fans to stadia?. *International Journal of Sport Finance*, 9(1), 3-19.
- Solberg, H. A., & Turner, P. (2010). Exporting sports rights to overseas markets: The case of European football. *Sport in Society*, 13(2), 354-366.
- Stavros, C., Meng, M. D., Westberg, K., & Farrelly, F. (2014). Understanding fan motivation for interacting on social media. *Sport management review*, 17(4), 455-469.
- Stone, C. (2007). The role of football in everyday life. *Soccer & Society*, 8(2-3), 169-184.
- Su, Y., Baker, B. J., Doyle, J. P., & Kunkel, T. (2020). The rise of an athlete brand: Factors influencing the social media following of athletes. *Sport Marketing Quarterly*, 29(1).
- Szymanski, S. (2010). The financial crisis and English football: The dog that will not bark. *International Journal of Sport Finance*, 5(1).  
<https://search.proquest.com/docview/229402256?accountid=10597>
- Szymanski, S., & Késenne, S. (2004). Competitive balance and gate revenue sharing in team sports. *The Journal of Industrial Economics*, 52(1), 165-177.

- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In M. J. Hatch & M. Schultz (Eds.), *Organizational Identity: A Reader* (pp. 56-65). Oxford University Press.
- Tajfel, H. (1981). *Human groups and social categories*. Cambridge University Press.
- Tapp, A. (2004). The loyalty of football fans: We'll support you evermore? *Journal of Database Marketing & Customer Strategy Management*, 11(3), 203–215.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.
- UEFA (2020). *The European club footballing landscape: Club licensing benchmarking financial year 2018*. UEFA.
- Wallrafen, T., Pawlowski, T., & Deutscher, C. (2019). Substitution in sports: The case of lower division football attendance. *Journal of Sports Economics*, 20(3), 319-343.
- Wallrafen, T., Deutscher, C., & Pawlowski, T. (2020). The impact of live broadcasting on stadium attendance reconsidered: some evidence from 3rd division football in Germany. *European Sport Management Quarterly*, <https://doi.org/10.1080/16184742.2020.1828967>.
- Wann, D. L. (2006). Understanding the positive social psychological benefits of sport team identification: The team identification-social psychological health model. *Group Dynamics: Theory, Research, and Practice*, 10(4), 272-296.
- Wann, D. L., & James, J. D. (2019). *Sport fans: The psychology and social impact of fandom*. Routledge.
- Watanabe, N., Yan, G., & Soebbing, B. P. (2015). Major league baseball and twitter usage: The economics of social media use. *Journal of Sport Management*, 29(6), 619-632.
- Watson, Amy. (2020, June 18). *Media consumption increase due to the coronavirus worldwide 2020, by country*. Statista. <https://www.statista.com/statistics/1106766/media-consumption-growth-coronavirus-worldwide-by-country/>

- Wegner, C. E., Delia, E. B., & Baker, B. J. (2020). Fan response to the identity threat of potential team relocation. *Sport Management Review*, 23(2), 215-228.
- Weimar, D., Holthoff, L. C., & Biscaia, R. (2020). When sponsorship causes anger: Understanding negative fan reactions to postings on sports clubs' online social media channels. *European Sport Management Quarterly*,
- Vrooman, J. (2007). Theory of the beautiful game: The unification of European football. *Scottish Journal of Political Economy*, 54(3), 314-354.

A BRIGHT SPOT FOR A SMALL LEAGUE

**Table 1.** Overview of lockdown periods in the observed football leagues (N=867 clubs).

Country	# Clubs	League	Confederation	Stop	Restart
Algeria	19	CNPD	CAF	16.03.2020	No Restart
Egypt	21	Premier League	CAF	11.03.2020	08.08.2020
Morocco	18	Botola	CAF	13.03.2020	27.07.2020
Tunisia	16	Ligue 1	CAF	23.02.2020	01.08.2020
South Africa	17	Premier Division	CAF	08.03.2020	14.08.2020
Argentina	28	Primera División	CONMEBOL	10.03.2020	-
Brasil	24	Camp. Brasileiro	CONMEBOL	08.12.2019	09.08.2020
Chile	20	Primera División	CONMEBOL	17.03.2020	30.08.2020
Colombia	22	Categoría Primera A	CONMEBOL	11.03.2020	-
Uruguay	19	Primera División	CONMEBOL	09.03.2020	08.08.2020
Mexico	21	Liga MX	CONCACAF	16.03.2020	25.07.2020
USA	26	MLS	CONCACAF	09.03.2020	13.08.2020
Australia	14	A-League	OFC	23.03.2020	21.07.2020
China	18	CSL	AFC	01.12.2019	25.07.2020
Iran	18	Gulf Pro League	AFC	28.02.2020	28.06.2020
Japan	20	J1 League	AFC	23.02.2020	04.07.2020
Kazakhstan	14	Premier Liga	AFC	15.03.2020	01.07.2020
Qatar	13	Qatar Stars League	AFC	07.03.2020	24.07.2020
Saudia Arabia	19	Professional League	AFC	13.03.2020	04.08.2020
South Korea	14	K League 1	AFC	21.07.2019	08.05.2020
UAE	16	UAE Pro League	AFC	14.03.2020	-
Austria	13	Bundesliga	UEFA	08.03.2020	02.06.2020
Belarus*	20	Wyschejschaja Liha	UEFA	No Stop	No Stop
Belgium	16	Jupiler Pro League	UEFA	07.03.2020	08.08.2020
Bulgaria	16	A Grupa	UEFA	08.03.2020	05.06.2020
Croatia	11	1. HNL	UEFA	09.03.2020	05.06.2020
Cyprus	15	Protathlima Cyta	UEFA	16.12.2019	21.08.2020
Czech Republic	17	Fortuna liga	UEFA	09.03.2020	23.05.2020
Denmark	16	Superligaen	UEFA	09.03.2020	29.05.2020
England	20	Premier League	UEFA	09.03.2020	17.06.2020
France	20	Ligue 1	UEFA	08.03.2020	21.08.2020
Germany	18	1. Bundesliga	UEFA	08.03.2020	16.05.2020
Greece	17	Super League 1	UEFA	01.03.2020	07.06.2020
Hungary	15	Nemzeti Bajnokság	UEFA	14.03.2020	29.05.2020
Italy	20	Serie A	UEFA	09.03.2020	22.06.2020
Israel	16	Ligat ha'Al	UEFA	01.03.2020	29.08.2020
Netherlands	18	Eredivisie	UEFA	08.03.2020	12.09.2020
Norway	19	Eliteserien	UEFA	01.12.2019	16.06.2020
Poland	18	Ekstraklasa	UEFA	09.03.2020	29.05.2020
Portugal	19	Primeira Liga	UEFA	08.03.2020	03.06.2020
Romania	14	Liga 1	UEFA	24.02.2020	21.08.2020
Russia	16	Premier League	UEFA	16.03.2020	19.06.2020
Scotland	13	Football League	UEFA	08.03.2020	01.08.2020
Serbia	22	Serbian Super Liga	UEFA	14.03.2020	29.05.2020
Spain	20	La Liga	UEFA	08.03.2020	11.06.2020
Sweden	18	Allsvenskan	UEFA	22.11.2019	14.06.2020
Switzerland	11	Super League	UEFA	23.02.2020	19.06.2020
Turkey	18	Süper Lig	UEFA	16.03.2020	12.06.2020
Ukraine	14	Premier League	UEFA	08.03.2020	-

Note: Dates are retrieved from [transfermarkt.de](https://www.transfermarkt.de); \*Belarus Clubs: Torpedo-BelAZ Zhodino, Torpedo Minsk, Slavia Mozyr, Shakhtjor Soligorsk, Rukh Brest, Neman Grodno, Luch Minsk, Isloch Minskiy Rayon, FK Vitebsk, FK Smolevichi, FK Slutsk, FK Minsk, FK Gorodeya, FK Gomel, Energetik-BGU Minsk, Dnyapro Mogilev, Dinamo Minsk, Dinamo Brest, Belshina Bobruisk, BATE Borisov



**Table 2.** Variable Overview.

<b>Variable</b>	<b>Description</b>	<b>Nature</b>
$\Delta$ FACEBOOK	Growth rate of Facebook followers of club x from day t-1 to t	Metric
$\Delta$ TWITTER	Growth rate of Twitter followers of club x from day t-1 to t	Metric
$\Delta$ INSTAGRAM	Growth rate of Instagram followers of club x from day t-1 to t	Metric
$\Delta$ YOUTUBE	Growth rate of Youtube views of club x from day t-1 to t	Metric
BELARUS	1 if club x is from Belarus, 0 otherwise	Dummy
LOCKDOWN	1 in the time of the lockdown (2020-03-24 – 2020-05-07), 0 otherwise	Dummy
COVID-19 CASES	Number of new daily COVID-19 cases per country divided by 10,000	Metric
WEEKDAYS	Weekday of day t	Nominal
MONTH	Month of day t	Nominal

**Table 3.** Descriptive statistics.

<b>Variable</b>	<b>Obs.</b>	<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>
ΔFACEBOOK	177,018	0.00021	0.00121	-0.03315	0.04858
ΔTWITTER	154,166	0.00030	0.00147	-0.04543	0.04994
ΔINSTAGRAM	177,081	0.00070	0.00166	-0.04779	0.04981
ΔYOUTUBE	140,581	0.00081	0.00194	-0.04806	0.04981
BELARUS	194,629	0.02	0.15	0.00	1.00
LOCKDOWN	194,629	0.20	0.40	0.00	1.00
COVID-19 CASES	194,629	0.16	0.64	0.00	7.84
<b>WEEKDAYS</b>					
Sunday	194,629	0.14	0.35	0.00	1.00
Monday	194,629	0.14	0.35	0.00	1.00
Tuesday	194,629	0.15	0.35	0.00	1.00
Wednesday	194,629	0.15	0.35	0.00	1.00
Thursday	194,629	0.15	0.35	0.00	1.00
Friday	194,629	0.14	0.35	0.00	1.00
Saturday	194,629	0.14	0.35	0.00	1.00
<b>MONTH</b>					
January	194,629	0.13	0.34	0.00	1.00
February	194,629	0.13	0.33	0.00	1.00
March	194,629	0.14	0.34	0.00	1.00
April	194,629	0.13	0.34	0.00	1.00
May	194,629	0.14	0.34	0.00	1.00
June	194,629	0.13	0.34	0.00	1.00
July	194,629	0.14	0.34	0.00	1.00
August	194,629	0.03	0.16	0.00	1.00
December	194,629	0.03	0.18	0.00	1.00

**Table 4.** Difference-in-differences Belarus clubs vs. lockdown clubs (before lockdown vs. during lockdown).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	$\Delta$ FACEBOOK	$\Delta$ FACEBOOK	$\Delta$ TWITTER	$\Delta$ TWITTER	$\Delta$ INSTAGRAM	$\Delta$ INSTAGRAM	$\Delta$ YOUTUBE	$\Delta$ YOUTUBE
LOCKDOWN	-0.00012*** (0.00001) [0.00000]	-0.00012*** (0.00001) [0.00000]	-0.00021*** (0.00002) [0.00000]	-0.00021*** (0.00002) [0.00000]	-0.00040*** (0.00002) [0.00000]	-0.00039*** (0.00002) [0.00000]	-0.00023*** (0.00004) [0.00000]	-0.00022*** (0.00004) [0.00000]
BELARUS	-0.00062* (0.00031) [0.04831]	-0.00062* (0.00031) [0.04716]	-0.00095*** (0.00017) [0.00000]	-0.0009***5 (0.00017) [0.00000]	-0.00027* (0.00014) [0.04919]	-0.00027* (0.00014) [0.04664]	0.00514*** (0.00096) [0.00000]	0.00513*** (0.00096) [0.00000]
<b>LOCKDOWN# BELARUS</b>	<b>0.00263***</b> <b>(0.00020)</b> <b>[0.00000]</b>	<b>0.00262***</b> <b>(0.00020)</b> <b>[0.00000]</b>	<b>0.00471***</b> <b>(0.00027)</b> <b>[0.00000]</b>	<b>0.00470***</b> <b>(0.00027)</b> <b>[0.00000]</b>	<b>0.00252***</b> <b>(0.00019)</b> <b>[0.00000]</b>	<b>0.00251***</b> <b>(0.00019)</b> <b>[0.00000]</b>	<b>0.00173***</b> <b>(0.00021)</b> <b>[0.00000]</b>	<b>0.00172***</b> <b>(0.00021)</b> <b>[0.00000]</b>
COVID-19 CASES		-0.00005*** (0.00001) [0.00083]		-0.00003* (0.00001) [0.02943]		-0.00005*** (0.00001) [0.00036]		-0.00008 (0.00003) [0.00350]
WEEKDAY	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
MONTH	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
CLUB FE	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
Constant	0.00010*** (0.00002) [0.00000]	0.00010*** (0.00002) [0.00000]	0.00021*** (0.00002) [0.00000]	0.00021*** (0.00002) [0.00000]	0.00071*** (0.00004) [0.00000]	0.00072*** (0.00004) [0.00000]	0.00084 (0.00016) [0.00000]	0.00084 (0.00016) [0.00000]
Observations	104542	104542	91150	91150	104100	104100	78713	78713
R <sup>2</sup>	0.211	0.211	0.178	0.178	0.212	0.212	0.107	0.108

Note: Robust estimations, standard errors values in parentheses; p-values in brackets. \*p<0.05, \*\*p<.0.01, \*\*\*p<0.001.

**Table 5.** Effect strength before and during the lockdown.

	$\Delta$ FACEBOOK	$\Delta$ TWITTER	$\Delta$ INSTAGRAM	$\Delta$ YOUTUBE
Average effect (Model 2,4,6,8)	0.262%	0.470%	0.251%	0.172%
Mean Belarus before lockdown	0.048%	0.037%	0.099%	0.138%
SD Belarus before lockdown	0.259%	0.184%	0.294%	0.423%
<b>Mean Effect</b>	5.46 times	12.70 times	2.53 times	1.25 times
<b>SD Effect strength</b>	1.01 SD	2.55 SD	0.85 SD	0.41 SD

**Table 6.** Difference-in-differences Belarus clubs vs. lockdown clubs (before lockdown vs. after lockdown).

	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	$\Delta$ FACEBOOK	$\Delta$ FACEBOOK	$\Delta$ TWITTER	$\Delta$ TWITTER	$\Delta$ INSTAGRAM	$\Delta$ INSTAGRAM	$\Delta$ YOUTUBE	$\Delta$ YOUTUBE
AFTER	0.00002	0.00002	-0.00000	-0.00000	0.00006	0.00006	-0.00025*	-0.00025*
LOCKDOWN	(0.00003)	(0.00003)	(0.00005)	(0.00005)	(0.00004)	(0.00004)	(0.00014)	(0.00014)
	[0.34864]	[0.33439]	[0.97174]	[0.97579]	[0.13779]	[0.13332]	[0.07648]	[0.07560]
BELARUS	0.00009	0.00010	0.00003	0.00003	0.00027*	0.00027*	0.00313***	0.00312***
	(0.00025)	(0.00025)	(0.00008)	(0.00008)	(0.00011)	(0.00011)	(0.00067)	(0.00067)
	[0.69932]	[0.67524]	[0.75485]	[0.73297]	[0.01767]	[0.01522]	[0.00000]	[0.00000]
<b>AFTER</b>	<b>0.00061***</b>	<b>0.00060***</b>	<b>0.00015</b>	<b>0.00014</b>	<b>0.00030**</b>	<b>0.00029**</b>	<b>-0.00002</b>	<b>-0.00000</b>
<b>LOCKDOWN#</b>	<b>(0.00011)</b>	<b>(0.00011)</b>	<b>(0.00008)</b>	<b>(0.00008)</b>	<b>(0.00009)</b>	<b>(0.00009)</b>	<b>(0.00016)</b>	<b>(0.00016)</b>
<b>BELARUS</b>	<b>[0.00000]</b>	<b>[0.00000]</b>	<b>[0.06688]</b>	<b>[0.07770]</b>	<b>[0.00118]</b>	<b>[0.00196]</b>	<b>[0.90111]</b>	<b>[0.98992]</b>
COVID-19 CASES		-0.00007***		-0.00002**		-0.00005***		0.00005*
		(0.00001)		(0.00001)		(0.00001)		(0.00002)
		[0.00000]		[0.00282]		[0.00000]		[0.00236]
WEEKDAY	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
MONTH	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
CLUB FE	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
Constant	0.00010***	0.00010***	0.00021***	0.00021***	0.00082***	0.00081***	0.00115	0.00115
	(0.00002)	(0.00002)	(0.00002)	(0.00002)	(0.00005)	(0.00005)	(0.00016)	(0.00016)
	[0.00000]	[0.00000]	[0.00000]	[0.00000]	[0.00000]	[0.00000]	[0.00000]	[0.00000]
Observations	141939	141939	123689	123689	142139	142139	110543	110543
R <sup>2</sup>	0.157	0.158	0.111	0.111	0.170	0.171	0.096	0.097

Note: Robust estimations, standard errors values in parentheses; p-values in brackets. \*p<0.05 \*\*p<.01 \*\*\*p<0.001.

**Table 7.** Effect strength before and after the lockdown.

	<b>ΔFACEBOOK</b>	<b>ΔTWITTER</b>	<b>ΔINSTAGRAM</b>	<b>ΔYOUTUBE</b>
Average effect (Model 10,12,14,16)	0.060%	0.014%	0.029%	-0.000%
Mean Belarus before lockdown	0.048%	0.037%	0.099%	0.093%
SD Belarus before lockdown	0.259%	0.184%	0.294%	0.217%
<b>Mean Effect</b>	1.25 times	0.38 times	0.29 times	0.00 times
<b>SD Effect strength</b>	0.23 SD	0.07 SD	0.10 SD	0.00 SD

1 **Table 8.** Difference-in-differences Belarus clubs vs. lockdown clubs (during lockdown vs. after lockdown).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	$\Delta$ FACEBOOK	$\Delta$ FACEBOOK	$\Delta$ TWITTER	$\Delta$ TWITTER	$\Delta$ INSTAGRAM	$\Delta$ INSTAGRAM	$\Delta$ YOUTUBE	$\Delta$ YOUTUBE
LOCKDOWN	0.00003* (0.00001) [0.01724]	0.00003* (0.00001) [0.01649]	0.00001 (0.00002) [0.55673]	0.00001 (0.00002) [0.55880]	0.00003 (0.00002) [0.17011]	0.00003 (0.00002) [0.16354]	0.00005 (0.00004) [0.14420]	0.00005 (0.00004) [0.16773]
BELARUS	0.00257*** (0.00035) [0.00000]	0.00257*** (0.00035) [0.00000]	0.00358*** (0.00023) [0.00000]	0.00358*** (0.00023) [0.00000]	0.00223*** (0.00017) [0.00000]	0.00223*** (0.00017) [0.00000]	0.00556*** (0.00069) [0.00000]	0.00556*** (0.00069) [0.00000]
<b>LOCKDOWN#</b>	<b>-0.00203***</b>	<b>-0.00203***</b>	<b>-0.00440***</b>	<b>-0.00440***</b>	<b>-0.00214***</b>	<b>-0.00215***</b>	<b>-0.00177***</b>	<b>-0.00174***</b>
<b>BELARUS</b>	<b>(0.00020)</b>	<b>(0.00020)</b>	<b>(0.00026)</b>	<b>(0.00026)</b>	<b>(0.00017)</b>	<b>(0.00017)</b>	<b>(0.00020)</b>	<b>(0.00020)</b>
	<b>[0.00000]</b>	<b>[0.00000]</b>	<b>[0.00000]</b>	<b>[0.00000]</b>	<b>[0.00000]</b>	<b>[0.00000]</b>	<b>[0.00000]</b>	<b>[0.00000]</b>
COVID-19 CASES		-0.00002 (0.00000) [0.00000]		0.00000 (0.00001) [0.44148]		-0.00003 (0.00001) [0.00001]		0.00018 (0.00002) [0.00000]
WEEKDAY	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
MONTH	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
CLUB FE	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
Constant	-0.00002 (0.00002) [0.24220]	-0.00002 (0.00002) [0.24994]	-0.00002 (0.00003) [0.52456]	-0.00002 (0.00003) [0.52500]	0.00036*** (0.00006) [0.00000]	0.00036*** (0.00006) [0.00000]	0.00090*** (0.00019) [0.00000]	0.00090*** (0.00019) [0.00000]
Observations	106775	106775	92815	92815	107142	107142	81920	81920
$R^2$	0.219	0.219	0.140	0.140	0.214	0.214	0.104	0.105

Note: Robust estimations, standard errors values in parentheses; p-values in brackets. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

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**Figure 1.** Growth rates social media follower before, during and after the worldwide lockdown.

