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Protectionism, Competitiveness and Inequality: Cross-Country Evidence from Soccer

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Abstract

Using club-level data on domestic-league and international points from 73 countries, this paper achieves a policy evaluation of country-specific regulations regarding soccer success. The results show that restrictions on foreign direct investment reduce international competitiveness of clubs, whereas restrictions on international migration policies have no significant impact on it. Domestic inequality across clubs increases with restrictions on minimum number of home-grown players, while it goes down with restrictions on foreign direct investment or restrictions on maximum number of foreign players. The results are robust to the consideration of other domestic regulations, market value of clubs or number of matches played.

JEL Classification: F21, F22, Z28

Key Words: Protectionism; Soccer Success; Competitiveness; Migration; Cross-Country Analysis

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Abstract

Using club-level data on domestic-league and international points from 73 countries, this paper achieves a policy evaluation of country-specific regulations regarding soccer success. The results show that restrictions on foreign direct investment reduce international competitiveness of clubs, whereas restrictions on international migration policies have no significant impact on it. Domestic inequality across clubs increases with restrictions on minimum number of home-grown players, while it goes down with restrictions on foreign direct investment or restrictions on maximum number of foreign players. The results are robust to the consideration of other domestic regulations, market value of clubs or number of matches played.

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1 Introduction

Several countries have adopted economic policies to improve their national interests at the expense of international integration (e.g., see De Bolle and Zettelmeyer (2019)). These so-called protectionist policies have resulted in restrictions on both foreign direct investment (FDI) and international migration, especially for certain sectors that are accepted as important.

Soccer is one of these sectors being subject to protectionism (e.g., see Giulianotti and Robertson (2004)). Despite the well-known positive effects of human capital through transferring foreign talents, politicians such as Boris Johnson of England has promoted restrictive policies on international migration through blaming the unsuccessful results by the national team of England on the large number of foreign players "soaking up space on our top teams," whereas Silvio Berlusconi of Italy has revealed his preferences for the soccer club of Milan playing with all-Italian players (e.g., see Royuela and Gásquez (2019)). Similarly, both former chairman of the English Football Association, Greg Dyke, and English soccer coach Paul Scholes have spoken about their concerns regarding how foreign players could damage the national team of England as youngsters are unable to break through.[1] Besides these national-team concerns, club-level concerns are also significant for international migration policies. For example, when soccer clubs borrow heavily to attract foreign stars, they may become financially unstable; e.g., soccer clubs in Turkey had to have their mounting debts restructured by the country's banking association as their overall debt was more than $1.87 billion.[2]

Protectionism on soccer has also been achieved through FDI restrictions, although FDI is an easy way for soccer clubs to obtain necessary financial resources to be more competitive. Potential reasons for FDI protectionism are soccer clubs or leagues no longer feeling local, or team owners not having any real connection with the city but only having a financial interest.[3]

[1] See https://www.theguardian.com/football/blog/2019/mar/25/foreigners-england-potential-youngsters for more details.

[2] See https://www.reuters.com/article/soccer-turkey-debt/update-1-soccer-turkeys-banking-association-says-will-restructure-club-debts-idUSL8N1Z71EG fore more details.

[3] See https://ussoccerplayers.com/2017/04/foreign-ownership-in-europe-football-soccer.html for more details.

For example, ProFans, a lobby group of Bundesliga supporters and ultras in Germany, has warned that "a storm would gather, nationwide" if foreign investors would be allowed to take over soccer clubs.[4]

This paper investigates how these protectionist policies affect international competitiveness and domestic inequality of soccer clubs.[5] This is achieved by using a cross-country data set from 73 countries at the top-tier soccer-club level. Three particular protectionist policies are investigated, namely FDI protectionism, restrictions on the maximum number of foreign players, and restrictions on the minimum number of home-grown players.[6] We focus on a policy evaluation based on country-specific regulations. In particular, we utilize the cross-country regulation data published by Fédération Internationale de Football Association (FIFA), where information on country-specific regulations is provided for FDI and international-migration protectionism. We combine this cross-country regulation data with club-level success data (measured by club-level points) coming from both domestic soccer leagues and international competitions.

In the existing literature, regarding FDI, studies such as by Jones and Cook (2015) have provided evidence for positive effects of FDI on club-level soccer success. Regarding international migration policies, studies such as by Royuela and Gásquez (2019) have shown that having more foreign players is associated with better international success of soccer clubs, whereas there is no impact on their domestic-league success.[7] For domestic inequality across clubs, studies such as by Milanovic (2005) or Binder and Findlay (2012) have shown that in-

[4] See https://www.espn.com/soccer/german-bundesliga/10/blog/post/3412475/what-would-happen-if-bundesliga-clubs-scrapped-50+1-ownership-rule and https://www.goal.com/en-us/news/premier-league-home-grown-players-rule-how-does-it-work/1mww3y06t775v1a7c6139l53ji for more details.

[5] Soccer clubs play with each other both domestically and internationally. While the domestic competition is achieved in the corresponding domestic leagues, international competitions are achieved through international organizations such as by the Union of European Football Associations (UEFA).

[6] It is important to emphasize that the latter two restrictions can have alternative meanings based on their scale. In particular, according to the data used in this paper, given that there is a restriction in a country, the maximum number of foreign players is restricted to about 6, whereas the minimum number of home-grown players is restricted to about 8, both on average across countries. Hence, for a given squad size of, say, 20, the restriction on minimum number of home-grown players corresponds to having at most 12 foreign players, which is double the restriction on the maximum number of foreign players, on average across countries.

[7] Regarding the effects of international migration on national-team performance, see studies such as by Baur and Lehmann (2007) who have shown that having more foreign players is associated with better national-team success.

ternational migration has a positive impact on inequality, whereas studies such as by Schmidt and Berri (2003) who have shown that international migration has a negative impact on inequality. Nevertheless, none of these studies have achieved a policy evaluation as in this paper by using data on country-specific regulations. Moreover, rather than focusing on only FDI or only international migration policies, this paper evaluates all protectionist policies at the same time to provide a bigger picture of the overall effects, which is also important for the identification of each effect. Finally, this paper has controlled for all other domestic regulations of which omission can lead into biased results regarding the orthogonal effects of protectionism.

The rest of the paper is organized as follows. The next section discusses the protectionist policies investigated in this paper. Section 3 depicts the data and the corresponding descriptive analysis. Section 4 introduces the estimation methodology, while Section 5 reveals the corresponding results. Section 6 achieves robustness checks. Section 7 concludes.

2 Protectionist Policies

This section discusses protectionist policies on foreign direct investment and international migration. The main objective is to connect these policies to their potential impact on international competitiveness and domestic inequality of soccer clubs, where the corresponding literature is also surveyed.

2.1 Foreign Direct Investment

Foreign direct investment (FDI) is one of the largest sources of external finance for domestic entities according to World-Bank (2017), although its benefits extend well beyond acquiring capital. These include technical spillover effects as well as managerial and organizational skills through which domestic entities become more productive and successful. For example, as shown by studies such as by Smarzynska Javorcik (2004), Javorcik and Spatareanu (2009), Du, Harrison, and Jefferson (2011), Farole and Winkler (2014), Newman, Rand, Talbot, and

Tarp (2015), or Javorcik, Lo Turco, and Maggioni (2018), FDI can facilitate transmission of foreign owners' technological knowledge, where quality standards become subject to improvement. Domestic entities can also benefit from managerial practices imposed by FDI, where, for instance, successful and highly productive workers or managers can be hired through international connections of foreign owners (e.g., see Alfaro and Chen (2018), Alfaro and Rodriguez-Clare (2004), Alfaro, Chanda, Kalemli-Ozcan, and Sayek (2010), Navaretti, Venables, and Barry (2006), Lipsey (2004), or Görg and Strobl (2005)). Even if only a certain number of domestic entities end up with having FDI, when FDI is allowed at the country level, other domestic entities can still benefit from FDI through spillover effects (e.g., see Blomström and Kokko (1998)). Nevertheless, due to the industrial structure, economic characteristics, or technological capability, the overall effects of FDI on domestic entities can be positive as in Haskel, Pereira, and Slaughter (2007), neutral as in Girma, Greenaway, and Wakelin (2001) or negative as in Konings (2001) or Mullen and Williams (2007).

In the context of soccer, these FDI effects correspond to having a more productive club management through international knowledge of foreign owners (e.g., see Jones and Cook (2015)). For example, foreign owners can bring a well-known strength and conditioning coach with the most up-to-date technical information about the performance of soccer players or they can simply connect with highly-skilled players through their international network managers. It is implied that FDI can facilitate competitiveness of soccer clubs (measured by international club points in this paper). Accordingly, one may expect soccer clubs with access to FDI to be more competitive internationally. However, similar to high-growth firms benefiting the most from FDI as shown by World-Bank (2017), soccer clubs may not benefit equally from FDI. In particular, when soccer clubs in a country start having access to FDI, foreign investors may want to invest in already the most successful soccer clubs in the country, which may lead into higher domestic inequality across clubs.

Based on the discussion so far, in this paper, we investigate the relationship of having access to FDI with international competitiveness and domestic inequality of soccer clubs.

This is achieved by using country-specific "Restrictions on Foreign Ownership" data discussed in details below.

2.2 International Migration

Human capital is the key determinant of competitiveness to stimulate productivity and growth (e.g., see Peri (2012), Peri, Shih, and Sparber (2015) or Ewers (2017)). Accordingly, when labor mobility is free, there is a global competition for high-skilled workers and talent between entities (e.g., see for Economic Co-operation and Development (2008)). This competition has also resulted in countries adopting international migration policies aimed at attracting high-skilled workers (e.g., see Becker (2012)).

In the context of soccer, the effects of international migration are reflected as more talented players being transferred from international markets (e.g., see Royuela and Gásquez (2019)). For example, foreign players can contribute to the success of soccer clubs both in their domestic league and in international competitions. It is implied that soccer clubs can benefit from free international migration of players. However, since talent of foreign soccer players is subject to their integration/assimilation based on the culture of their new club, city or country, there is a chance for transferring foreign soccer players not having any significant impact on the competitiveness of clubs at the same time; e.g., studies such as by Dustmann (1996) or Depalo, Faini, and Venturini (2006) have shown that personal characteristics, nationality or family context affect the migrant's integration. Finally, there is evidence in the literature regarding the effects of international migration of soccer players on the inequality across clubs; e.g., Milanovic (2005) have shown that international migration increases inequality across clubs, whereas Binder and Findlay (2012) have provided only weak evidence for the same relationship.

Within this context, to preserve the national identity of clubs or the success of their national teams, soccer federations/associations of countries (or international confederations that they are members of) have introduced two different protectionist policies (e.g., see Allan and Moffat (2014), Berlinschi, Schokkaert, and Swinnen (2013), Gelade and Dobson (2007) or

Yamamura (2009)). One of them is "Restrictions on Maximum Number of Foreign Players" and the other one is "Restrictions on Minimum Number of Home-Grown Players." While the former restriction is on the maximum number of foreign players that a club can have within its squad, the latter restriction is on the minimum number of home-grown players defined as those who have been trained in a country for a certain number of years when they are young (e.g., see Royuela and Gásquez (2019)).

In this paper, we investigate the relationship of these protectionist policies with international competitiveness and domestic inequality of soccer clubs. This is achieved by using country-specific "Restrictions on Maximum Number of Foreign Players" and "Restrictions on Minimum Number of Home-Grown Players" data discussed in details below.

3 Data and Descriptive Statistics

This section introduces the data on country-specific regulations and club-level points.

3.1 Data Sources

Since our objective is to have a policy investigation, we focus on protectionist measures decided by policy makers at the country level. The data source is the Global Club Football 2018 Report published by Fédération Internationale de Football Association (FIFA). This report provides information on several country-specific regulations around the world coming from FIFA member associations (representing countries) as of September 2017, including both protectionist policies and other domestic regulations.

Regarding protectionist policies, "Restrictions on Foreign Ownership" provides information on whether FDI is subject to any restrictions for soccer clubs at the country level. This is a dummy variable taking a value of 1 for soccer clubs located in a country having any type of restriction on soccer-specific FDI. Information on another protectionist policy obtained from the same data set is for "Restrictions on Maximum Number of Foreign Players" which is another dummy variable taking a value of 1 for soccer clubs located in a country having such

restriction. The final protectionist policy obtained from the same data set is "Restrictions on Minimum Number of Home-Grown Players" which is another dummy variable taking a value of 1 for soccer clubs located in a country having such restrictions. As an alternative, the last two variables are also utilized in their actual values during the robustness analyses.

Regarding other domestic regulations, which are considered as control variables in this paper, the data set includes the following dummy variables. "Regulation on Required Legal Form of Clubs" provides information for whether a country has restrictions on the legal form of clubs in their top-tier domestic leagues such as being a company or association. "Regulation on Multi-Club Ownership" provides information on whether a country has any restrictions for owning more than one club in its top-tier domestic league. "Existence of Collective Bargaining Agreement" provides information on whether there is a collective bargaining agreement between players and clubs in a country. "Club Licensing" provides information whether clubs are required by their country to satisfy certain criteria to be included in competitions, such as having an academy, infrastructure, stadium or financial requirements. "Restrictions on Maximum Squad Size" provides information whether clubs are restricted to have a maximum number of players in their squad who can play in domestic competitions.

This regulation-based data set obtained from FIFA has been combined with two club-level performance points, one at the international level, the other at the domestic-league level. For international points, following Royuela and Gásquez (2019), the information has been obtained from the Elo rating scores used to have a world ranking across soccer clubs, published by www.footballdatabase.com.[8] For domestic points, data from www.transfermarkt.com have been utilized from the top-tier domestic league of countries at the end of the season (following several recent studies in the literature such as by Bernardo, Ruberti, and Verona (2019), Jiang and Zhang (2019) or Erkan and Kara (2020)). It is important to emphasize that international points capture the success of soccer clubs in all domestic and international games as a stock variable over time, whereas domestic points capture their success only in their top-tier domestic league at the end of a particular season.

[8] See studies such as by Gásquez and Royuela (2016) who discuss the advantages of using Elo rating scores over other official scores.

Data on two other control variables, namely "Market Value of the Club" and "Number of Matches in the Domestic League" have also been obtained from www.transfermarkt.com, while data on "Country Points" showing the overall soccer success of a country, including both domestic clubs and the national team, have been obtained from the web page of FIFA. In order to satisfy causality, both international and domestic-league points have been obtained for 2018 that corresponds to the period approximately one year after the FIFA regulation data have been collected (on September 2017). The combination of the all data sources (of FIFA, www.footballdatabase.com and www.transfermarkt.com) has resulted in a cross-country data set for 73 countries covering 999 soccer clubs.

3.2 Descriptive Analysis

Data on country-specific regulations are shown on world maps in the Online Appendix Figures, where there is evidence for heterogeneity across countries. These regulations are summarized in the Online Appendix Table, where only 15% of countries have restrictions on foreign ownership, while restrictions on maximum number of foreign players are achieved by 71% of countries; restrictions on minimum number of home-grown players are applied by 37% of countries. Among other domestic regulations, club licensing is required by 93% of countries, while multi-club ownership is subject to regulations in 56% of countries.

Regarding the implications for international competitiveness, box plots showing the relationship between international club points (per 1000 Euros) and country-specific regulations are given in Figure 1. As is evident, restrictions on foreign ownership, minimum number of home-grown players, or multi-club ownership are related with lower international club points controlled for their market value, while other regulations do not seem to have an impact on their own.

Regarding the implications for domestic inequality, the difference in domestic-league points across clubs are considered for all independent club pairs in each country. The corresponding box plots showing the relationship between the difference in domestic-league points across clubs (per domestic game controlled for market value of clubs) and country-specific

regulations are given in Figure 2, where larger interquartile ranges mean higher inequality. As is evident, all protectionist policies, together with restrictions on multi-club ownership, are related with lower domestic inequality measures across clubs.

For sure, these box plots in Figure 1 (Figure 2) only provide information on descriptive relationships between international competitiveness (domestic inequality) of soccer clubs and country-specific regulations. Nevertheless, we need a formal investigation to investigate how protectionist policies are related to international competitiveness or domestic inequality, after controlling for other domestic regulations and club-level characteristics, which we achieve next.

4 Estimation Methodology

Based on our discussion in Section 2, we are interested in formally investigating the effects of protectionism on both international competitiveness and domestic inequality of soccer clubs. Accordingly, we achieve two different empirical analyses, where identification is achieved by the cross-sectional nature of the combined data set.

4.1 Protectionism versus International Competitiveness

The first analysis (for the effects of protectionism on international competitiveness) is based on the stochastic version of the following regression:

$$\underbrace{P_i^j}_{\text{International Points}} = \underbrace{\sum_{n=1}^{3} \alpha_n \tau_{in}}_{\text{Protectionist Policies}} + \underbrace{\sum_{m=1}^{5} \beta_m d_{im}}_{\text{Domestic Regulations}} + \underbrace{\sum_{s=1}^{2} \gamma_s c_{is}^j}_{\text{Control Variables}} \tag{1}$$

where P_i^j represents international points of club j in country i, τ_{in} for $n = 1, 2, 3$ represents three dummy variables for country-specific protectionist policies (of restrictions on foreign ownership, maximum number of foreign players and minimum number of home-grown players), d_{im} for $m = 1, 2, 3, 4, 5$ represents five other country-specific dummy variables for

domestic regulations (of required legal form of clubs, multi-club ownership, existence of collective bargaining agreement, club licensing and restrictions on maximum squad size), and c_{is}^{j} for $k = 1, 2$ represents two other control variables (of log market value of the club, and number of matches in the domestic league).[9] The regression also includes a constant, and it is estimated by pooling across all clubs in all countries.

4.2 Protectionism versus Domestic Inequality

The second analysis (for the effects of protectionism on domestic inequality) is based on the stochastic version of the following regression:

$$\underbrace{G_i^{jk}}_{\text{Domestic Inequality}} = \underbrace{\sum_{n=1}^{3} \alpha_n \tau_{in}}_{\text{Protectionist Policies}} + \underbrace{\sum_{m=1}^{5} \beta_m d_{im}}_{\text{Domestic Regulations}} + \underbrace{\sum_{s=1}^{3} \gamma_s c_{is}^{jk}}_{\text{Control Variables}} \tag{2}$$

where G_i^{jk} represents either the difference (in levels) of domestic-league points or the difference (in levels) of international points between clubs j and k in country i under the condition that these two clubs are in the very same country i.[10] Since G_i^{jk} represents club-pair jk in country i, it is calculated based on each club pair (coming from the same country i) in the sample; accordingly, the number of observations in the regression based on Equation 2 will be much higher compared to the one in Equation 1.

Similar to Equation 1, τ_{in} in Equation 2 for $n = 1, 2, 3$ represents three dummy variables for country-specific protectionist policies (of restrictions on foreign ownership, maximum number of foreign players and minimum number of home-grown players), d_{im} for $m = 1, 2, 3, 4, 5$ represents five other country-specific dummy variables for domestic regulations (of required legal form of clubs, multi-club ownership, existence of collective bargaining

[9] The number of matches in the domestic league is a control variable as it determines the total number of available points and thus competitiveness/inequality may be affected by this scale factor. The number of matches in the domestic league also controls for the potential improvement in the quality of soccer played (through learning by doing). The possibility of an injury or tiredness of players may also be affected by the number of matches in the domestic league.

[10] This inequality measure has been prefered mostly to include the control variable of the market value of soccer clubs in estimations as it is an important determinant of inequality.

agreement, club licensing and restrictions on maximum squad size), and c_{is}^{jk} for $k = 1, 2, 3$ represents three other control variables (of log relative market value of clubs that is club-pair jk specific, country points multiplied by 1000, and number of matches in the domestic league).[11] The regression also includes a constant, and it is estimated by pooling across all domestic-club pairs in all countries.

In order to identify the policy effects of regulations on international competitiveness and domestic inequality (and thus to satisfy causality), both international and domestic-league points have been obtained for 2018 that corresponds to the period approximately one year after the FIFA regulation data have been collected (on September 2017). The estimation is by ordinary least squares.

5 Estimation Results

This section summarizes the estimation results based on the effects of protectionism, other domestic regulations, and other control variables on international competitiveness and domestic inequality across soccer clubs.

5.1 Effects of Protectionism

We start with the estimation results based on Equation 1 that are given in Table 1. As is evident, based on alternative regression specifications, only the restrictions on foreign ownership (and thus FDI) are significantly related to lower international points among protectionist policies. It is implied that soccer clubs that have access to FDI have been more successful in general, since the dependent variable of international points capture the success of soccer clubs in all domestic and international games. Regarding the corresponding magnitude, soccer clubs that have access to FDI have obtained about 20 more international points, on average, compared to those that do not have access to FDI. Nevertheless, protectionist policies

[11] Country points were not included as control variables in regressions based on international competitiveness (represented by Equation 1) as they are mostly determined by international points of country-specific soccer clubs in the first place.

based on international migration have no significant impact on the overall success of soccer clubs. Since the effects of FDI correspond to having a more productive club management through international knowledge of foreign owners (e.g., see Jones and Cook (2015)), it is implied that club management is a more important determinant of soccer success compared to restrictions on international migration policies. These results are robust to the consideration of both other domestic regulations and other control variables.

The estimation results based on Equation 2 are given in Table 2, where the difference in domestic-league points across clubs is used as the dependent variable. It is evident that restrictions on both foreign ownership (FDI) and maximum number of foreign players reduce domestic inequality across soccer clubs, whereas restrictions on minimum number of home-grown players increase domestic inequality. This result is consistent with studies showing evidence for unequal gains from FDI across soccer clubs such as by World-Bank (2017). Regarding international migration, on one hand, it is implied that having access to unlimited number of foreign players, which is a more liberal policy, results in unequal gains across soccer clubs, potentially due to certain clubs attracting better foreign talents (after controlling for the market value of clubs, together with other control variables, according to our regressions). On the other hand, since number of home-grown players is limited within a country (and thus they are subject to scarce resources), not having any restrictions on minimum number of home-grown players, which is also a more liberal policy, results in lower inequality across soccer clubs.

Regarding magnitudes, according to Table 2, having access to FDI increases the domestic-league point difference by about 1.5 points at the end of the season, while having unlimited number of foreign players increases such difference by about 2.5 points. Having restrictions on minimum number of home-grown players also increases the domestic-league point difference by about 1.3 points. These results are also robust to the consideration of both other domestic regulations and other control variables.

When Equation 2 is estimated by using data on the difference in international points, the results in Table 2 are replaced with those in Table 3. As is evident, regarding protectionist

policies, the results are the same qualitatively, although they are different quantitatively due to using alternative scales. In particular, restrictions on both foreign ownership (FDI) and maximum number of foreign players reduce domestic inequality across soccer clubs, whereas restrictions on minimum number of home-grown players increase domestic inequality. These results are also robust to the consideration of both other domestic regulations and other control variables.

5.2 Effects of Other Domestic Regulations

Regulations on required legal form of clubs and existence of collective bargaining agreements have positive impacts on international points according to Table 1, whereas club licensing has a negative impact on international points. The evidence on the effects of other domestic regulations on international points is either mixed or insignificant based on alternative regression specifications.

Regarding the effects on domestic inequality across clubs, the contribution of regulations on required legal form of clubs is positive and significant, independent of using domestic or international points in Table 2 and Table 3. Having a regulation on multi-club ownership also increases domestic inequality when difference in domestic-league points are used in Table 2; however, this evidence is not consistent across regression specifications of Table 3 where difference in international points are considered. In contrast, existence of collective bargaining agreements contribute to domestic inequality in Table 3, but the effects in Table 2 are not consistent across regression specifications. Club licensing also reduces domestic inequality in almost all regressions, whereas the effects of having restrictions on maximum squad size is highly mixed.

5.3 Effects of Other Control Variables

Log market value of clubs contribute positively and significantly to international points of soccer clubs, suggesting that doubling the market value of a club results in about 71 more international points according to Table 1. When the effects on domestic inequality are con-

sidered, the contribution of log relative market value of clubs is positive and significant in both Tables 2 and 3. In terms of magnitude, doubling the market value of a club results in about 7 points of a difference across clubs in their domestic-league according to Table 2, while this difference is about 68 points when difference in international points is considered in Table 3.

Country points (representing the overall points of a country, which is common across clubs of a country) contributes negatively to the difference in domestic-league points, whereas the same variable contributes negatively to the difference in international points. It is implied that country points bring soccer clubs together regarding their domestic-league success, however their international success diverge from each other when their country has higher points.

Since different domestic leagues have alternative number of matches in a given season, these effects are controlled in all tables. As is evident, although the number of matches do not contribute to the international competitiveness of clubs according to Table 1, it contributes positively to the domestic inequality across clubs in Tables 2 and 3. In terms of magnitudes, having an additional game increases the difference in domestic-league points by about 0.4 points in Table 2, while the increase is about 2.1 points when the difference in international points is considered in Table 3.

6 Robustness Checks

This section achieves robustness checks based on countries with alternative number of clubs in the domestic league and based on actual the scale of restrictions regarding maximum number of foreign players and minimum number of home-grown players, where potential nonlinearities are also considered.

6.1 Robustness #1: Countries with Alternative Number of Clubs

The number of matches in domestic leagues, which also reflects the number of soccer clubs in domestic leagues, has a range between 14 and 38 across countries (which correspond to

8 versus 20 clubs in domestic leagues, respectively). Since club-level observations coming from all countries are pooled in the benchmark regressions above, the results may be biased towards the relationship between the relevant variables in the countries with more clubs, although number of matches is one of the control variables in the benchmark investigation. Accordingly, for robustness #1, the sample is restricted to clubs that play at least 30 matches in their domestic leagues (which corresponds to countries with at least 16 soccer clubs).

The corresponding results based on Equation 1 (representing the effects of protectionism on international competitiveness) are given in Table 4 that are highly in line with those in Table 1, confirming that having access to FDI corresponds to higher overall soccer success at the club level, whereas restrictions on international migration policies have no such significant impact.

Similarly, results based on Equation 2 (representing the effects of protectionism on domestic inequality) are given in Table 5 and Table 6 that are also highly consistent with those in Table 2 and Table 3, respectively, except for the effects of foreign ownership.

6.2 Robustness #2: Scale of Restrictions and Nonlinearities

In order to have a robustness check based on the scale of restrictions and nonlinearities, the regression based on Equation 1 is replaced with the following expression:

$$\underbrace{P_i^j}_{\text{International Points}} = \underbrace{\underbrace{\alpha_1 \tau_{i1}}_{\text{Foreign Ownership}} + \underbrace{\alpha_2 MFP_i + \alpha_3 \left(MFP_i\right)^2}_{\text{Maximum Foreign Players}} + \underbrace{\alpha_4 MHP_i + \alpha_5 \left(MHP_i\right)^2}_{\text{Minimum Home Players}}}_{\text{Protectionist Policies}} + \underbrace{\sum_{m=1}^{5} \beta_m d_{im}}_{\text{Domestic Regulations}} + \underbrace{\sum_{s=1}^{2} \gamma_s c_{is}^j}_{\text{Control Variables}} \quad (3)$$

where, given that there are restrictions in country i, the only difference with respect to Equation 1 is replacing the dummy variables for restrictions on maximum number of foreign players and minimum number of home-grown players with the actual number of restrictions and their squared values (to consider potentially nonlinearities). In particular, foreign own-

ership in country i is still captured by a dummy variable τ_{i1}, whereas, this time, maximum number of foreign players in country i is represented by MFP_i, and minimum number of home-grown players in country i is represented by MHP_i.

For this robustness check, similarly, the regression based on Equation 2 is replaced with the following expression:

$$\underbrace{G_i^{jk}}_{\text{Domestic Inequality}} = \underbrace{\underbrace{\alpha_1 \tau_{i1}}_{\text{Foreign Ownership}} + \underbrace{\alpha_2 MFP_i + \alpha_3 \left(MFP_i\right)^2}_{\text{Maximum Foreign Players}} + \underbrace{\alpha_4 MHP_i + \alpha_5 \left(MHP_i\right)^2}_{\text{Minimum Home Players}}}_{\text{Protectionist Policies}} + \underbrace{\sum_{m=1}^{5} \beta_m d_{im}}_{\text{Domestic Regulations}} + \underbrace{\sum_{s=1}^{3} \gamma_s c_{is}^{jk}}_{\text{Control Variables}} \quad (4)$$

where, given that there are restrictions in country i, again, the only difference with respect to Equation 2 is replacing the dummy variables for restrictions on maximum number of foreign players and minimum number of home-grown players with the actual number of restrictions and their squared values (to consider potentially nonlinearities).

The results based on Equation 3 are depicted in Table 7, where, across alternative regression specifications, there is evidence for nonlinearities in the effects of minimum number of home-grown players, MHP_i. In particular, given that there are restrictions in a certain country, international points decrease with MHP_i and increase with $\left(MHP_i\right)^2$, suggesting that there is a threshold value of about 6 above (below) which MHP_i increases (decreases) international competitiveness of clubs.[12]

The results based on Equation 4 are given in Table 8 and Table 9, where, this time, there is evidence for nonlinearities in the effects of maximum number of foreign players, MFP_i. Specifically, according to Table 8, given that there are restrictions in a certain country, inequality across clubs based on domestic-league points decrease with MFP_i and increase

[12] This threshold value of MHP_i is calculated by using:

$$\frac{\partial P_i^j}{\partial MHP_i} = \alpha_4 + 2\alpha_5 MHP_i = 0$$

where α_4 and α_5 are estimated coefficients.

with $(MFP_i)^2$, suggesting that there is a threshold value of about 10 above (below) which MFP_i increases (decreases) inequality across clubs.[13]

Also by considering the benchmark results, it is implied that having restrictions on maximum number of foreign players or minimum number of home-grown players are not effective by themselves; it is also the scale of these restrictions that is significant in explaining international competitiveness or inequality across soccer clubs.

7 Conclusion

Protectionist policies are conducted by several countries to improve their national interests at the expense of international integration. In the context of soccer, these correspond to policies protecting the national identity of clubs or the success of national soccer teams. This paper has investigated the effects of these protectionist policies on the international competitiveness and domestic inequality of soccer clubs by using club-level data from 73 countries. The main contribution is achieved by having a policy evaluation of country-specific regulations, where other domestic regulations, market value of clubs, or number of matches in domestic leagues are controlled for.

The investigation results in showing that having access to FDI corresponds to higher overall soccer success at the club level, whereas restrictions on international migration policies have no such significant impact. This is in contrast to studies such as by Royuela and Gásquez (2019) who have shown that having more foreign players is associated with better international success of soccer clubs. Since the effects of FDI correspond to having a more productive club management through international knowledge of foreign owners (e.g., see Jones and Cook (2015)), it is implied that club management is a more important determinant of soccer success compared to restrictions on international migration policies.

[13] This threshold value of MFP_i is calculated by using:

$$\frac{\partial G_i^{jk}}{\partial MFP_i} = \alpha_2 + 2\alpha_3 MFP_i = 0$$

where α_2 and α_3 are estimated coefficients.

The results also show that domestic inequality across soccer clubs increases with international migration restrictions based on minimum number of home-grown players; this is consistent with studies such as by Milanovic (2005) or Binder and Findlay (2012) who have shown that international migration has a positive impact on inequality. In contrast, domestic inequality across soccer clubs goes down with international migration restrictions based on maximum number of foreign players; this is consistent with studies such as by Schmidt and Berri (2003) who have shown that international migration has a negative impact on inequality (measured by an increase in competitive balance). It is implied that the nature of the international migration policy is an important determinant of domestic inequality across soccer clubs. These results can be attributed to certain (bigger) clubs attracting better foreign talents and having limited number of talented home-grown players within a country. The reasons behind this difference between international migration policies is further investigated, where their scales, as well as nonlinearities in them, are shown to be effective in explaining both international competitiveness and inequality across soccer clubs.

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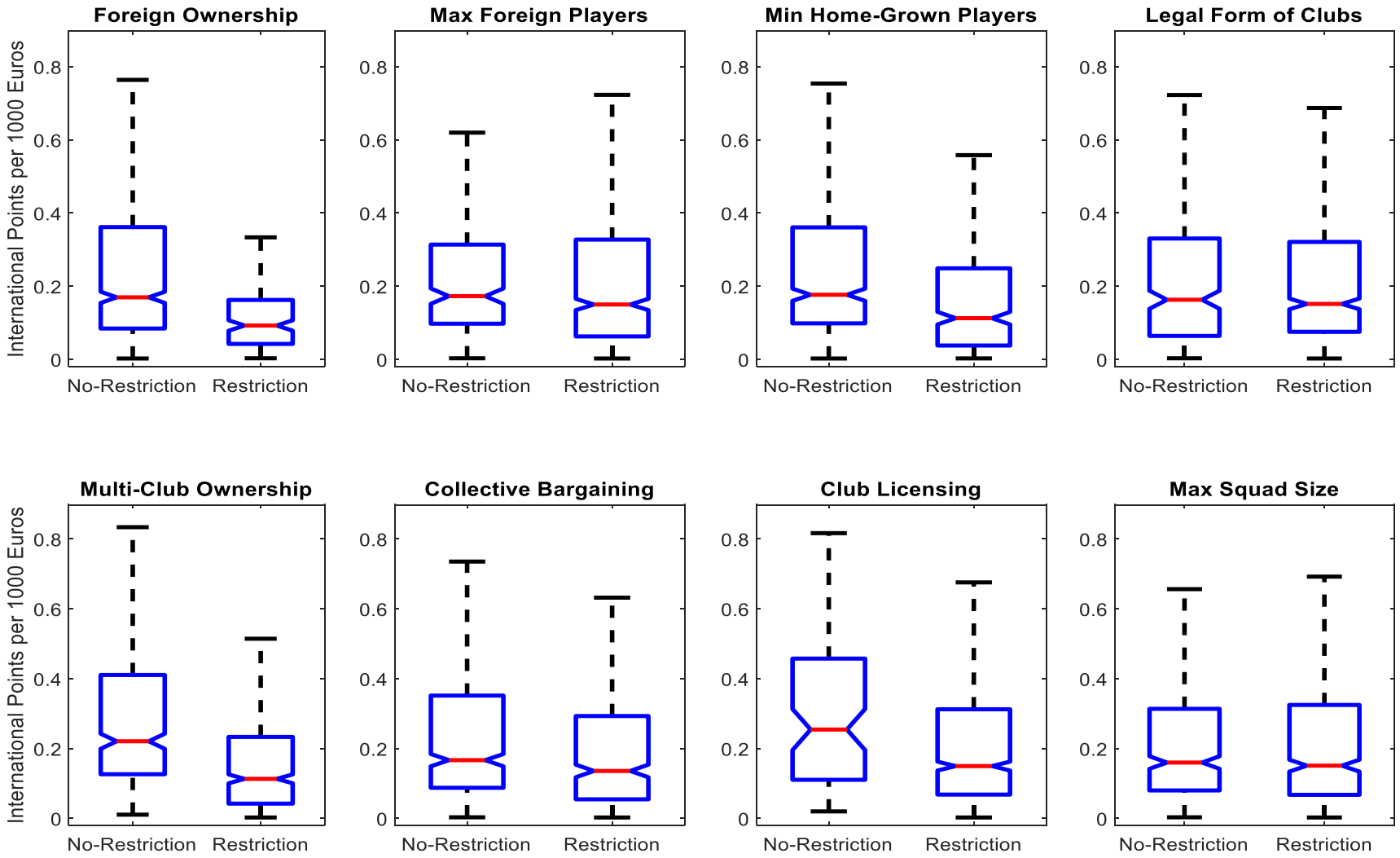
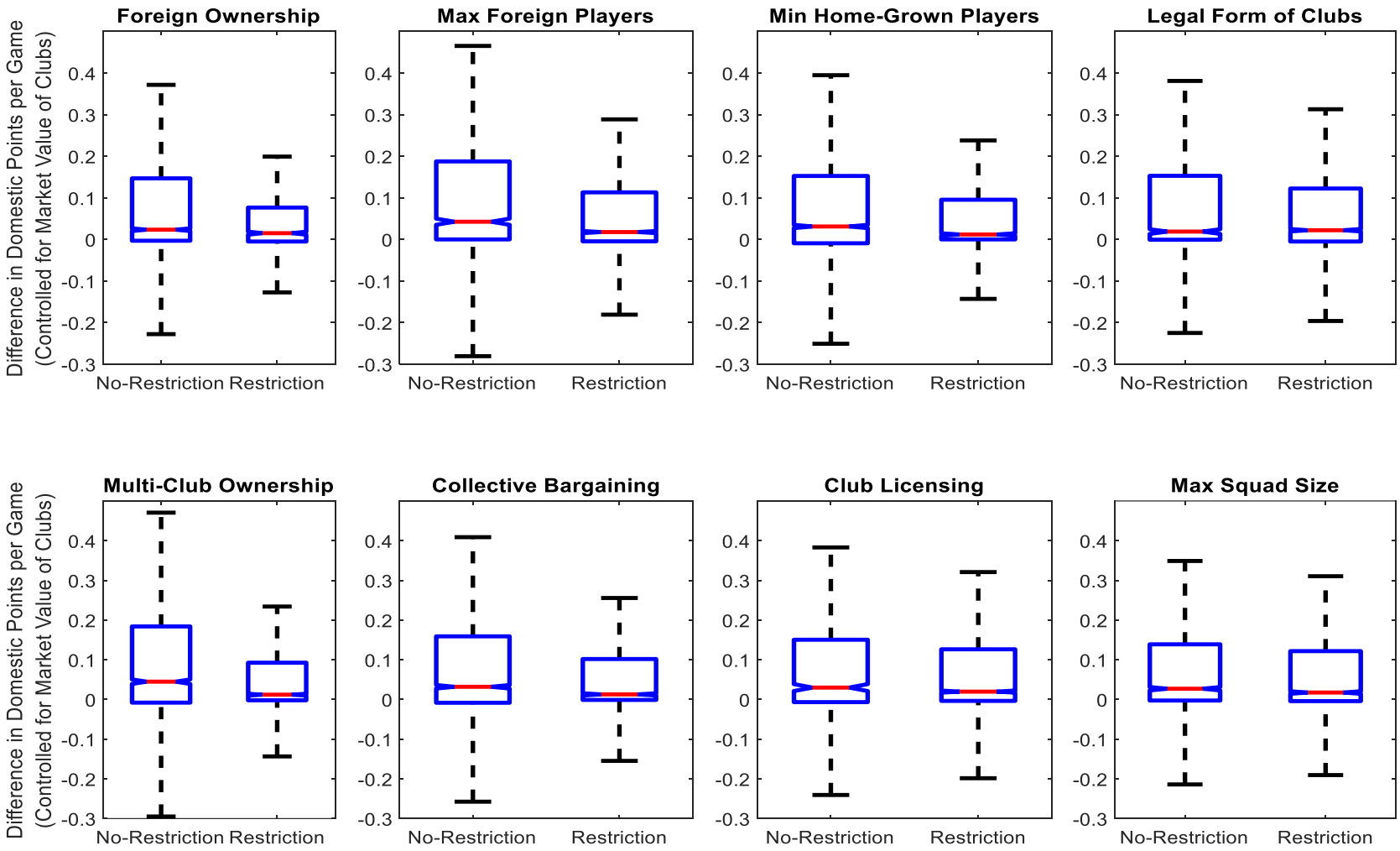
Figure 1 - Regulations versus International Competitiveness



Notes: On each box, the central mark indicates the median, and the bottom and top edges of the box indicate the 25th and 75th percentiles, respectively, after ignoring outliers. The whiskers extend to the minimum and maximum data points.

Figure 2 - Regulations versus Domestic Inequality



Notes: On each box, the central mark indicates the median, and the bottom and top edges of the box indicate the 25th and 75th percentiles, respectively, after ignoring outliers. The whiskers extend to the minimum and maximum data points The vertical axes represent the difference in domestic-league points per game divided by the difference in market value of clubs in million euros.

Table 1 - Protectionism and International Competitiveness

	Dependent Variable: International Points						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Protectionist Policies							
Restrictions on Foreign Ownership	-22.40*	-22.37*			-23.78**	-21.02*	
	(9.062)	(8.919)			(8.975)	(9.014)	
Restrictions on Maximum Number of Foreign Players	-11.01		-8.209		-10.58		-8.948
	(7.764)		(7.727)		(7.756)		(7.740)
Restrictions on Minimum Number of Home-Grown Players	-7.479			-9.309		-7.001	-9.821
	(6.801)			(6.739)		(6.796)	(6.752)
Domestic Regulations							
Regulations on Required Legal Form of Clubs	25.73***	24.63***	22.15**	21.28**	25.92***	24.40***	22.19**
	(7.190)	(7.129)	(7.068)	(7.021)	(7.188)	(7.132)	(7.064)
Regulations on Multi-Club Ownership	7.084	6.294	2.237	1.762	7.286	6.068	2.359
	(7.348)	(7.313)	(7.117)	(7.096)	(7.346)	(7.316)	(7.113)
Existence of Collective Bargaining Agreement	12.34+	11.01+	12.44+	11.73+	12.12+	11.17+	12.71+
	(6.721)	(6.671)	(6.738)	(6.684)	(6.718)	(6.673)	(6.736)
Club Licensing	-26.60*	-24.50*	-27.66*	-23.90*	-27.53*	-23.51+	-26.43*
	(12.30)	(12.08)	(12.31)	(12.14)	(12.27)	(12.11)	(12.33)
Restrictions on Maximum Squad Size	-11.16+	-14.50*	-10.70	-11.56+	-12.20+	-13.62*	-9.457
	(6.748)	(6.469)	(6.679)	(6.480)	(6.683)	(6.525)	(6.730)
Other Control Variables							
Log Market Value of the Club	71.82***	70.91***	70.46***	70.99***	71.24***	71.44***	71.28***
	(2.387)	(2.317)	(2.317)	(2.371)	(2.329)	(2.374)	(2.383)
Number of Matches in the Domestic League	0.262	0.394	0.296	0.339	0.295	0.367	0.252
	(0.511)	(0.505)	(0.511)	(0.507)	(0.510)	(0.506)	(0.512)
Constant	764.8***	760.2***	773.3***	762.9***	767.5***	757.3***	769.2***
	(23.48)	(22.73)	(23.32)	(22.82)	(23.35)	(22.90)	(23.47)
N	991	991	991	991	991	991	991
R-sq	0.560	0.558	0.556	0.556	0.559	0.559	0.557
adj. R-sq	0.555	0.555	0.552	0.553	0.555	0.555	0.553
F	124.6	155.1	153.7	153.9	138.2	138.0	137.0

Notes: Standard errors in parentheses. +, *, ** and *** represent significance at the 10%, 5%, 1% and 0.1% levels, respectively.

Table 2 - Protectionism and Domestic Inequality based on Domestic-League Points

	Dependent Variable: Difference of Domestic-League Points						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Protectionist Policies							
Restrictions on Foreign Ownership	-1.458***	-0.789*			-1.162**	-1.109**	
	(0.362)	(0.355)			(0.357)	(0.361)	
Restrictions on Maximum Number of Foreign Players	-2.465***		-2.370***		-2.515***		-2.296***
	(0.328)		(0.325)		(0.328)		(0.326)
Restrictions on Minimum Number of Home-Grown Players	1.309***			1.222***		1.377***	1.113***
	(0.279)			(0.276)		(0.280)	(0.275)
Domestic Regulations							
Regulations on Required Legal Form of Clubs	1.433***	1.116***	1.208***	0.993***	1.397***	1.160***	1.197***
	(0.300)	(0.300)	(0.295)	(0.294)	(0.301)	(0.299)	(0.295)
Regulations on Multi-Club Ownership	2.131***	1.886***	1.783***	1.663***	2.083***	1.941***	1.759***
	(0.319)	(0.320)	(0.306)	(0.307)	(0.320)	(0.319)	(0.306)
Existence of Collective Bargaining Agreement	0.675*	0.415	0.713*	0.441	0.691*	0.404	0.704*
	(0.277)	(0.276)	(0.277)	(0.276)	(0.277)	(0.276)	(0.277)
Club Licensing	-1.626***	-0.734	-1.376**	-1.080*	-1.340**	-1.048*	-1.628***
	(0.482)	(0.474)	(0.479)	(0.478)	(0.479)	(0.478)	(0.482)
Restrictions on Maximum Squad Size	-0.391	-0.632*	-0.0530	-0.766**	-0.131	-0.896**	-0.258
	(0.285)	(0.274)	(0.279)	(0.275)	(0.280)	(0.278)	(0.284)
Other Control Variables							
Log Relative Market Value of Clubs	6.915***	7.005***	6.967***	6.974***	6.955***	6.961***	6.935***
	(0.161)	(0.162)	(0.161)	(0.162)	(0.161)	(0.162)	(0.161)
Country Points (x1000)	-4.720***	-4.413***	-4.360***	-4.808***	-4.325***	-4.826***	-4.704***
	(0.397)	(0.390)	(0.389)	(0.399)	(0.389)	(0.399)	(0.398)
Number of Matches in the Domestic League	0.407***	0.419***	0.405***	0.420***	0.405***	0.421***	0.407***
	(0.0206)	(0.0206)	(0.0206)	(0.0206)	(0.0206)	(0.0206)	(0.0206)
Constant	4.708***	2.387**	4.522***	2.689***	4.537***	2.612***	4.664***
	(0.790)	(0.742)	(0.791)	(0.742)	(0.790)	(0.742)	(0.791)
N	6889	6889	6889	6889	6889	6889	6889
R-sq	0.283	0.275	0.280	0.276	0.281	0.277	0.281
adj. R-sq	0.282	0.274	0.279	0.275	0.280	0.276	0.280
F	247.0	289.5	296.9	291.8	268.6	263.9	269.4

Notes: Standard errors in parentheses. +, *, ** and *** represent significance at the 10%, 5%, 1% and 0.1% levels, respectively. The dependent variable of Difference of Domestic-League Points has been calculated within each country individually, after which they have been pooled across countries for estimation purposes.

Table 3 - Protectionism and Domestic Inequality based on International Points

	Dependent Variable: Difference of International Points						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Protectionist Policies							
Restrictions on Foreign Ownership	-11.19***	-7.643**			-8.851**	-10.09***	
	(2.979)	(2.912)			(2.937)	(2.956)	
Restrictions on Maximum Number of Foreign Players	-7.765**		-7.067**		-8.171**		-6.470*
	(2.695)		(2.674)		(2.698)		(2.676)
Restrictions on Minimum Number of Home-Grown Players	10.37***			9.185***		10.59***	8.875***
	(2.295)			(2.259)		(2.295)	(2.262)
Domestic Regulations							
Regulations on Required Legal Form of Clubs	11.21***	10.00***	9.484***	8.816***	10.93***	10.34***	9.403***
	(2.468)	(2.454)	(2.426)	(2.412)	(2.471)	(2.451)	(2.423)
Regulations on Multi-Club Ownership	5.830*	4.813+	3.172	2.700	5.458*	5.226*	2.974
	(2.625)	(2.620)	(2.517)	(2.513)	(2.627)	(2.618)	(2.514)
Existence of Collective Bargaining Agreement	12.07***	11.32***	12.39***	11.56***	12.22***	11.22***	12.30***
	(2.277)	(2.262)	(2.281)	(2.258)	(2.280)	(2.259)	(2.278)
Club Licensing	7.212+	11.42**	9.176*	8.728*	9.460*	9.027*	7.189+
	(3.964)	(3.887)	(3.939)	(3.918)	(3.938)	(3.916)	(3.968)
Restrictions on Maximum Squad Size	4.410+	4.816*	7.053**	3.976+	6.467**	2.798	5.425*
	(2.347)	(2.242)	(2.299)	(2.256)	(2.306)	(2.280)	(2.334)
Other Control Variables							
Log Relative Market Value of Clubs	68.00***	68.29***	68.21***	68.20***	68.15***	68.13***	68.10***
	(1.346)	(1.347)	(1.348)	(1.347)	(1.347)	(1.346)	(1.347)
Country Points (x1000)	11.50***	14.32***	14.35***	11.30***	14.63***	11.14***	11.62***
	(3.265)	(3.196)	(3.196)	(3.266)	(3.196)	(3.264)	(3.268)
Number of Matches in the Domestic League	2.099***	2.128***	2.079***	2.131***	2.082***	2.144***	2.093***
	(0.169)	(0.168)	(0.169)	(0.168)	(0.169)	(0.168)	(0.169)
Constant	-7.263	-15.52*	-8.679	-13.11*	-8.578	-13.82*	-7.577
	(6.484)	(6.072)	(6.490)	(6.075)	(6.487)	(6.074)	(6.490)
N	6896	6896	6896	6896	6896	6896	6896
R-sq	0.316	0.314	0.314	0.314	0.314	0.316	0.315
adj. R-sq	0.315	0.313	0.313	0.314	0.313	0.315	0.314
F	289.7	349.4	349.4	351.0	315.8	317.5	316.7

Notes: Standard errors in parentheses. +, *, ** and *** represent significance at the 10%, 5%, 1% and 0.1% levels, respectively. The dependent variable of Difference of International Points has been calculated within each country individually, after which they have been pooled across countries for estimation purposes.

Table 4 - Robustness #1 for Protectionism and International Competitiveness

	Dependent Variable: International Points						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Protectionist Policies							
Restrictions on Foreign Ownership	-22.69+	-22.89+			-23.38*	-22.02+	
	(11.88)	(11.70)			(11.89)	(11.71)	
Restrictions on Maximum Number of Foreign Players	-3.867		1.126		-2.746		-0.171
	(11.50)		(11.35)		(11.49)		(11.37)
Restrictions on Minimum Number of Home-Grown Players	-15.14			-15.88		-14.91	-15.89
	(10.16)			(10.14)		(10.13)	(10.17)
Domestic Regulations							
Regulations on Required Legal Form of Clubs	26.02*	24.83*	19.04+	20.25*	25.03*	25.72*	20.25*
	(10.39)	(10.33)	(9.944)	(9.946)	(10.38)	(10.34)	(9.962)
Regulations on Multi-Club Ownership	2.524	3.732	-1.748	-2.544	3.460	2.918	-2.569
	(10.43)	(10.35)	(10.10)	(9.960)	(10.42)	(10.35)	(10.10)
Existence of Collective Bargaining Agreement	0.342	-1.280	0.125	1.214	-0.755	-0.411	1.250
	(9.975)	(9.705)	(9.974)	(9.696)	(9.959)	(9.713)	(9.987)
Club Licensing	-1.096	-7.224	-4.572	2.011	-7.445	-0.880	2.005
	(22.91)	(22.49)	(22.54)	(22.88)	(22.53)	(22.88)	(22.90)
Restrictions on Maximum Squad Size	-4.758	-8.644	-5.697	-2.786	-7.653	-6.190	-2.719
	(10.46)	(9.408)	(10.27)	(9.393)	(10.29)	(9.545)	(10.43)
Other Control Variables							
Log Market Value of the Club	77.10***	76.08***	74.59***	75.68***	76.12***	77.04***	75.68***
	(3.600)	(3.536)	(3.466)	(3.527)	(3.543)	(3.592)	(3.531)
Number of Matches in the Domestic League	1.446	0.816	1.793	2.377	0.859	1.377	2.381
	(1.815)	(1.763)	(1.713)	(1.726)	(1.773)	(1.802)	(1.751)
Constant	652.3***	683.8***	661.7***	629.7***	683.5***	653.2***	629.6***
	(61.83)	(58.18)	(57.33)	(60.57)	(58.25)	(61.72)	(60.82)
N	565	565	565	565	565	565	565
R-sq	0.576	0.575	0.572	0.573	0.575	0.576	0.573
adj. R-sq	0.569	0.568	0.565	0.567	0.568	0.569	0.567
F	75.35	93.85	92.74	93.45	83.29	83.84	82.92

Notes: Standard errors in parentheses. +, *, ** and *** represent significance at the 10%, 5%, 1% and 0.1% levels, respectively. These regressions only include observations from clubs playing at least 30 matches in their domestic leagues.

Table 5 - Robustness #1 for Protectionism and Domestic Inequality based on Domestic-League Points

	Dependent Variable: Difference of Domestic-League Points						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Protectionist Policies							
Restrictions on Foreign Ownership	-0.354	0.441			-0.309	0.362	
	(0.487)	(0.486)			(0.489)	(0.484)	
Restrictions on Maximum Number of Foreign Players	-4.146***		-4.249***		-4.303***		-4.084***
	(0.489)		(0.482)		(0.489)		(0.481)
Restrictions on Minimum Number of Home-Grown Players	2.298***			2.528***		2.519***	2.293***
	(0.431)			(0.433)		(0.434)	(0.431)
Domestic Regulations							
Regulations on Required Legal Form of Clubs	0.170	0.363	0.474	0.0427	0.561	-0.0574	0.0722
	(0.458)	(0.457)	(0.432)	(0.441)	(0.453)	(0.461)	(0.437)
Regulations on Multi-Club Ownership	2.080***	2.381***	1.848***	2.632***	1.920***	2.537***	1.997***
	(0.453)	(0.455)	(0.439)	(0.436)	(0.454)	(0.454)	(0.439)
Existence of Collective Bargaining Agreement	1.325***	0.636	1.473***	0.494	1.465***	0.515	1.334***
	(0.396)	(0.388)	(0.396)	(0.386)	(0.396)	(0.387)	(0.396)
Club Licensing	-2.277*	-1.325	-1.210	-2.496**	-1.221	-2.478**	-2.263*
	(0.930)	(0.921)	(0.912)	(0.938)	(0.912)	(0.938)	(0.930)
Restrictions on Maximum Squad Size	-0.00775	-0.835*	0.493	-1.354***	0.474	-1.310**	0.0144
	(0.431)	(0.399)	(0.422)	(0.402)	(0.423)	(0.406)	(0.430)
Other Control Variables							
Log Relative Market Value of Clubs	8.341***	8.419***	8.391***	8.363***	8.387***	8.368***	8.347***
	(0.224)	(0.227)	(0.225)	(0.226)	(0.225)	(0.226)	(0.224)
Country Points (x1000)	-7.793***	-6.349***	-6.710***	-7.535***	-6.606***	-7.661***	-7.910***
	(0.717)	(0.689)	(0.663)	(0.703)	(0.684)	(0.723)	(0.698)
Number of Matches in the Domestic League	0.918***	0.845***	0.973***	0.786***	0.958***	0.806***	0.935***
	(0.0783)	(0.0778)	(0.0745)	(0.0731)	(0.0782)	(0.0778)	(0.0746)
Constant	-9.192***	-10.83***	-12.63***	-7.032**	-12.18***	-7.603**	-9.709***
	(2.587)	(2.552)	(2.433)	(2.488)	(2.534)	(2.602)	(2.486)
N	4101	4101	4101	4101	4101	4101	4101
R-sq	0.303	0.285	0.298	0.291	0.298	0.291	0.303
adj. R-sq	0.301	0.284	0.297	0.289	0.297	0.289	0.301
F	161.8	181.3	193.2	186.4	173.9	167.8	177.9

Notes: Standard errors in parentheses. +, *, ** and *** represent significance at the 10%, 5%, 1% and 0.1% levels, respectively. The dependent variable of Difference of Domestic-League Points has been calculated within each country individually, after which they have been pooled across countries for estimation purposes. These regressions only include observations from clubs playing at least 30 matches in their domestic leagues.

Table 6 - Robustness #1 for Protectionism and Domestic Inequality based on International Points

	Dependent Variable: Difference of International Points						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Protectionist Policies							
Restrictions on Foreign Ownership	-4.941	-1.932			-4.591	-2.537	
	(3.773)	(3.737)			(3.788)	(3.722)	
Restrictions on Maximum Number of Foreign Players	-13.96***		-14.49***		-15.29***		-13.10***
	(3.786)		(3.736)		(3.794)		(3.729)
Restrictions on Minimum Number of Home-Grown Players	19.36***			20.05***		20.11***	19.29***
	(3.336)			(3.333)		(3.335)	(3.336)
Domestic Regulations							
Regulations on Required Legal Form of Clubs	-6.955*	-4.383	-4.966	-8.431*	-3.674	-7.726*	-8.334*
	(3.546)	(3.516)	(3.349)	(3.391)	(3.514)	(3.545)	(3.386)
Regulations on Multi-Club Ownership	9.952**	10.30**	7.586*	10.85**	8.646*	11.50***	8.808**
	(3.506)	(3.495)	(3.402)	(3.350)	(3.513)	(3.486)	(3.395)
Existence of Collective Bargaining Agreement	11.52***	9.779**	12.84***	8.959**	12.72***	8.801**	11.65***
	(3.072)	(2.995)	(3.076)	(2.978)	(3.078)	(2.987)	(3.071)
Club Licensing	16.55*	25.06***	25.59***	15.99*	25.43***	15.87*	16.74*
	(7.211)	(7.087)	(7.074)	(7.217)	(7.075)	(7.220)	(7.210)
Restrictions on Maximum Squad Size	0.906	0.296	5.225	-3.177	4.952	-3.483	1.215
	(3.342)	(3.078)	(3.274)	(3.095)	(3.282)	(3.128)	(3.334)
Other Control Variables							
Log Relative Market Value of Clubs	77.93***	78.21***	78.17***	77.97***	78.16***	77.97***	77.94***
	(1.787)	(1.797)	(1.794)	(1.790)	(1.794)	(1.790)	(1.787)
Country Points (x1000)	-25.11***	-14.20**	-16.66**	-25.55***	-15.11**	-24.67***	-26.75***
	(5.555)	(5.307)	(5.144)	(5.409)	(5.302)	(5.562)	(5.413)
Number of Matches in the Domestic League	6.124***	6.068***	6.691***	5.888***	6.467***	5.748***	6.366***
	(0.606)	(0.599)	(0.577)	(0.562)	(0.606)	(0.599)	(0.578)
Constant	-113.9***	-134.4***	-145.8***	-112.6***	-139.2***	-108.6***	-121.2***
	(20.05)	(19.65)	(18.87)	(19.15)	(19.65)	(20.03)	(19.28)
N	4101	4101	4101	4101	4101	4101	4101
R-sq	0.353	0.345	0.347	0.350	0.347	0.351	0.352
adj. R-sq	0.351	0.343	0.346	0.349	0.346	0.349	0.351
F	202.5	239.2	241.7	245.2	217.7	220.7	222.6

Notes: Standard errors in parentheses. +, *, ** and *** represent significance at the 10%, 5%, 1% and 0.1% levels, respectively. The dependent variable of Difference of International Points has been calculated within each country individually, after which they have been pooled across countries for estimation purposes. These regressions only include observations from clubs playing at least 30 matches in their domestic leagues.

Table 7 - Robustness #2 for Protectionism and International Competitiveness

	Dependent Variable: International Points						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Protectionist Policies							
Restrictions on Foreign Ownership	-23.77**	-22.37*			-26.43**	-18.65*	
	(9.192)	(8.919)			(8.979)	(8.934)	
Maximum Number of Foreign Players	-4.038+		-0.907		-0.714		-4.525*
	(2.162)		(2.092)		(2.085)		(2.160)
Maximum Number of Foreign Players Squared	0.0679		-0.0960		-0.130		0.134
	(0.143)		(0.133)		(0.133)		(0.141)
Minimum Number of Home-Grown Players	-5.477**			-7.054***		-6.505***	-6.653***
	(1.783)			(1.567)		(1.586)	(1.729)
Minimum Number of Home-Grown Players Squared	0.495***			0.528***		0.505***	0.545***
	(0.102)			(0.0936)		(0.0941)	(0.100)
Domestic Regulations							
Regulations on Required Legal Form of Clubs	19.84**	24.63***	21.51**	17.03*	25.36***	19.53**	17.06*
	(7.123)	(7.129)	(7.032)	(7.056)	(7.126)	(7.145)	(7.062)
Regulations on Multi-Club Ownership	20.77**	6.294	5.540	10.65	11.55	14.38+	15.16*
	(7.612)	(7.313)	(7.207)	(7.177)	(7.463)	(7.385)	(7.316)
Existence of Collective Bargaining Agreement	17.84**	11.01+	13.20*	16.40*	12.79+	15.79*	18.37**
	(6.621)	(6.671)	(6.691)	(6.635)	(6.666)	(6.630)	(6.637)
Club Licensing	-32.01**	-24.50*	-25.98*	-26.12*	-24.90*	-26.16*	-31.76**
	(12.17)	(12.08)	(12.20)	(12.11)	(12.15)	(12.09)	(12.21)
Restrictions on Maximum Squad Size	-10.10	-14.50*	-8.799	-12.48+	-10.61	-14.28*	-8.333
	(6.493)	(6.469)	(6.582)	(6.367)	(6.585)	(6.414)	(6.476)
Other Control Variables							
Log Market Value of the Club	75.36***	70.91***	72.09***	72.93***	73.14***	73.28***	74.69***
	(2.414)	(2.317)	(2.393)	(2.351)	(2.410)	(2.353)	(2.407)
Number of Matches in the Domestic League	-0.302	0.394	0.374	-0.0665	0.418	-0.0512	-0.364
	(0.527)	(0.505)	(0.521)	(0.506)	(0.520)	(0.505)	(0.528)
Constant	751.9***	760.2***	753.1***	756.0***	741.4***	752.3***	760.9***
	(24.47)	(22.73)	(24.52)	(22.99)	(24.75)	(23.02)	(24.29)
N	991	991	991	991	991	991	991
R-sq	0.577	0.558	0.559	0.570	0.563	0.572	0.574
adj. R-sq	0.572	0.555	0.555	0.566	0.558	0.568	0.570
F	111.3	155.1	138.2	144.5	126.2	131.0	120.1

Notes: Standard errors in parentheses. +, *, ** and *** represent significance at the 10%, 5%, 1% and 0.1% levels, respectively.

Table 8 - Robustness #2 for Protectionism and Domestic Inequality based on Domestic-League Points

	Dependent Variable: Difference of Domestic-League Points						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Protectionist Policies							
Restrictions on Foreign Ownership	-1.073**	-0.789*			-0.718*	-1.054**	
	(0.374)	(0.355)			(0.357)	(0.362)	
Maximum Number of Foreign Players	-0.655***		-0.588***		-0.581***		-0.680***
	(0.0914)		(0.0878)		(0.0879)		(0.0910)
Maximum Number of Foreign Players Squared	0.0326***		0.0338***		0.0329***		0.0358***
	(0.00601)		(0.00549)		(0.00551)		(0.00591)
Minimum Number of Home-Grown Players	0.00208			0.0177		0.0544	-0.0614
	(0.0784)			(0.0674)		(0.0686)	(0.0753)
Minimum Number of Home-Grown Players Squared	0.0152**			0.0107*		0.00914*	0.0180***
	(0.00473)			(0.00436)		(0.00439)	(0.00464)
Domestic Regulations							
Regulations on Required Legal Form of Clubs	0.854**	1.116***	1.174***	0.617*	1.280***	0.755*	0.739*
	(0.304)	(0.300)	(0.295)	(0.301)	(0.300)	(0.304)	(0.302)
Regulations on Multi-Club Ownership	2.578***	1.886***	1.690***	2.026***	1.887***	2.286***	2.265***
	(0.339)	(0.320)	(0.312)	(0.315)	(0.327)	(0.327)	(0.321)
Existence of Collective Bargaining Agreement	0.726**	0.415	0.487+	0.574*	0.471+	0.532+	0.747**
	(0.279)	(0.276)	(0.277)	(0.277)	(0.277)	(0.278)	(0.279)
Club Licensing	-1.954***	-0.734	-1.295**	-1.338**	-1.240**	-1.338**	-1.941***
	(0.491)	(0.474)	(0.479)	(0.487)	(0.479)	(0.486)	(0.491)
Restrictions on Maximum Squad Size	-0.505+	-0.632*	-0.452	-0.643*	-0.507+	-0.763**	-0.411
	(0.278)	(0.274)	(0.277)	(0.273)	(0.278)	(0.276)	(0.276)
Other Control Variables							
Log Relative Market Value of Clubs	6.904***	7.005***	6.988***	6.956***	6.983***	6.944***	6.919***
	(0.161)	(0.162)	(0.161)	(0.162)	(0.161)	(0.162)	(0.161)
Country Points (x1000)	-4.556***	-4.413***	-4.545***	-4.568***	-4.512***	-4.596***	-4.533***
	(0.399)	(0.390)	(0.392)	(0.401)	(0.393)	(0.401)	(0.399)
Number of Matches in the Domestic League	0.372***	0.419***	0.389***	0.403***	0.391***	0.404***	0.369***
	(0.0213)	(0.0206)	(0.0211)	(0.0207)	(0.0211)	(0.0207)	(0.0213)
Constant	5.915***	2.387**	5.030***	3.232***	4.904***	3.227***	6.058***
	(0.852)	(0.742)	(0.842)	(0.758)	(0.844)	(0.758)	(0.851)
N	5.915***	2.387**	5.030***	3.232***	4.904***	3.227***	6.058***
R-sq	(0.852)	(0.742)	(0.842)	(0.758)	(0.844)	(0.758)	(0.851)
adj. R-sq	6889	6889	6889	6889	6889	6889	6889
F	0.285	0.275	0.279	0.278	0.279	0.279	0.284

Notes: Standard errors in parentheses. +, *, ** and *** represent significance at the 10%, 5%, 1% and 0.1% levels, respectively.

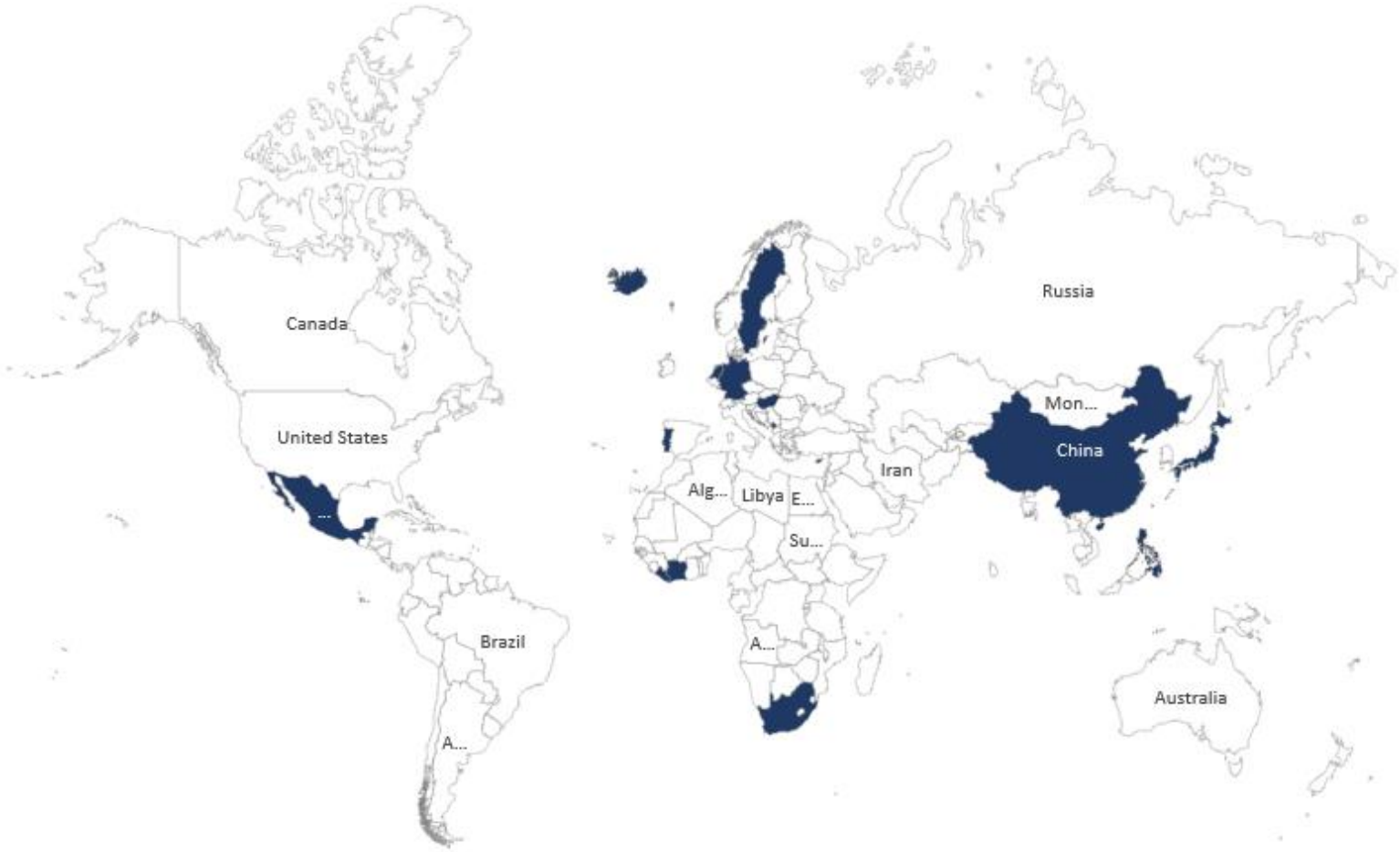
Table 9 - Robustness #2 for Protectionism and Domestic Inequality based on International Points

	Dependent Variable: Difference of International Points						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Protectionist Policies							
Restrictions on Foreign Ownership	-8.551**	-7.643**			-6.191*	-10.18***	
	(3.065)	(2.912)			(2.933)	(2.956)	
Maximum Number of Foreign Players	-0.902		-0.00322		0.0552		-1.103
	(0.748)		(0.720)		(0.720)		(0.745)
Maximum Number of Foreign Players Squared	0.0868+		0.0729		0.0653		0.112*
	(0.0492)		(0.0450)		(0.0452)		(0.0484)
Minimum Number of Home-Grown Players	-0.771			-0.471		-0.118	-1.276*
	(0.643)			(0.551)		(0.560)	(0.617)
Minimum Number of Home-Grown Players Squared	0.191***			0.176***		0.161***	0.212***
	(0.0388)			(0.0356)		(0.0358)	(0.0381)
Domestic Regulations							
Regulations on Required Legal Form of Clubs	5.862*	10.00***	8.969***	4.119+	9.883***	5.456*	4.947*
	(2.491)	(2.454)	(2.422)	(2.454)	(2.460)	(2.483)	(2.471)
Regulations on Multi-Club Ownership	8.829**	4.813+	0.627	7.614**	2.325	10.12***	6.341*
	(2.778)	(2.620)	(2.563)	(2.569)	(2.686)	(2.668)	(2.632)
Existence of Collective Bargaining Agreement	12.77***	11.32***	10.30***	13.51***	10.17***	13.09***	12.94***
	(2.285)	(2.262)	(2.277)	(2.265)	(2.277)	(2.267)	(2.285)
Club Licensing	4.718	11.42**	10.44**	4.756	10.91**	4.765	4.813
	(4.025)	(3.887)	(3.932)	(3.975)	(3.937)	(3.971)	(4.027)
Restrictions on Maximum Squad Size	3.383	4.816*	3.537	4.806*	3.067	3.659	4.126+
	(2.279)	(2.242)	(2.272)	(2.230)	(2.282)	(2.253)	(2.264)
Other Control Variables							
Log Relative Market Value of Clubs	67.79***	68.29***	68.44***	67.81***	68.40***	67.76***	67.85***
	(1.340)	(1.347)	(1.346)	(1.341)	(1.346)	(1.340)	(1.341)
Country Points (x1000)	13.05***	14.32***	12.37***	13.39***	12.65***	13.12***	13.23***
	(3.268)	(3.196)	(3.220)	(3.269)	(3.222)	(3.268)	(3.269)
Number of Matches in the Domestic League	1.856***	2.128***	2.053***	1.923***	2.066***	1.930***	1.830***
	(0.174)	(0.168)	(0.173)	(0.169)	(0.173)	(0.169)	(0.174)
Constant	-1.858	-15.52*	-10.78	-6.223	-11.86+	-6.291	-0.707
	(6.961)	(6.072)	(6.892)	(6.180)	(6.909)	(6.175)	(6.953)
N	-1.858	-15.52*	-10.78	-6.223	-11.86+	-6.291	-0.707
R-sq	(6.961)	(6.072)	(6.892)	(6.180)	(6.909)	(6.175)	(6.953)
adj. R-sq	6896	6896	6896	6896	6896	6896	6896
F	0.323	0.314	0.315	0.321	0.315	0.323	0.322

Notes: Standard errors in parentheses. +, *, ** and *** represent significance at the 10%, 5%, 1% and 0.1% levels, respectively.

Online Appendix for "Protectionism, Competitiveness and Inequality: Cross-Country Evidence from Soccer" by Hakan Yilmazkuday

Appendix Figure A.1 – Restrictions on Foreign Ownership



Notes: Countries that have a restriction on foreign ownership are colored.

Online Appendix for "Protectionism, Competitiveness and Inequality: Cross-Country Evidence from Soccer" by Hakan Yilmazkuday

Appendix Figure A.2 – Restrictions on Maximum Number of Foreign Players

Notes: Countries that have a restriction on maximum number of foreign players are colored.

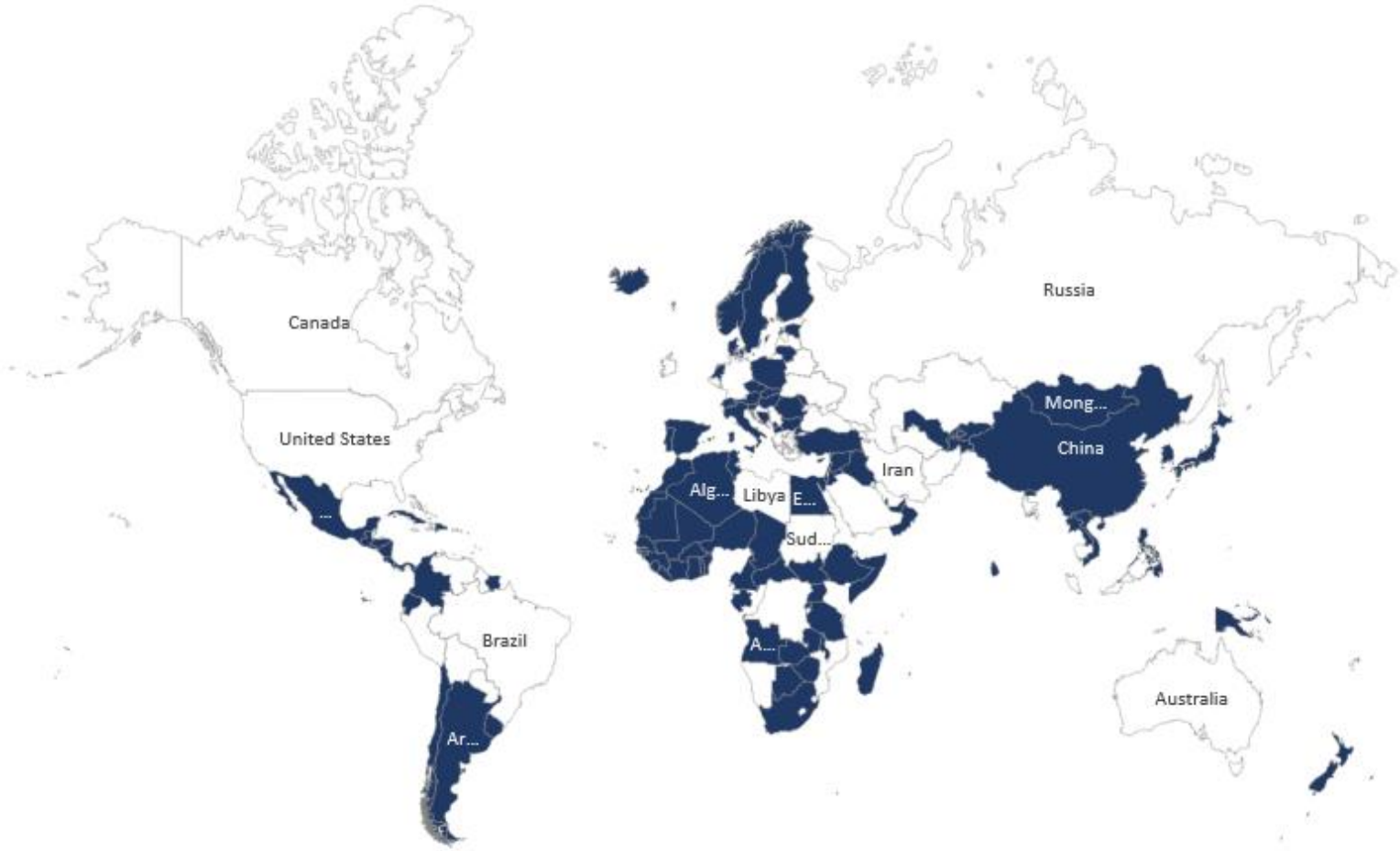
Online Appendix for "Protectionism, Competitiveness and Inequality: Cross-Country Evidence from Soccer" by Hakan Yilmazkuday

Appendix Figure A.3 – Restrictions on Minimum Number of Home-Grown Players

Notes: Countries that have a restriction on minimum number of home-grown players are colored.

Online Appendix for "Protectionism, Competitiveness and Inequality: Cross-Country Evidence from Soccer" by Hakan Yilmazkuday

Appendix Figure A.4 – Regulations on Required Legal Form of Clubs



Notes: Countries that have a required legal form of clubs are colored.

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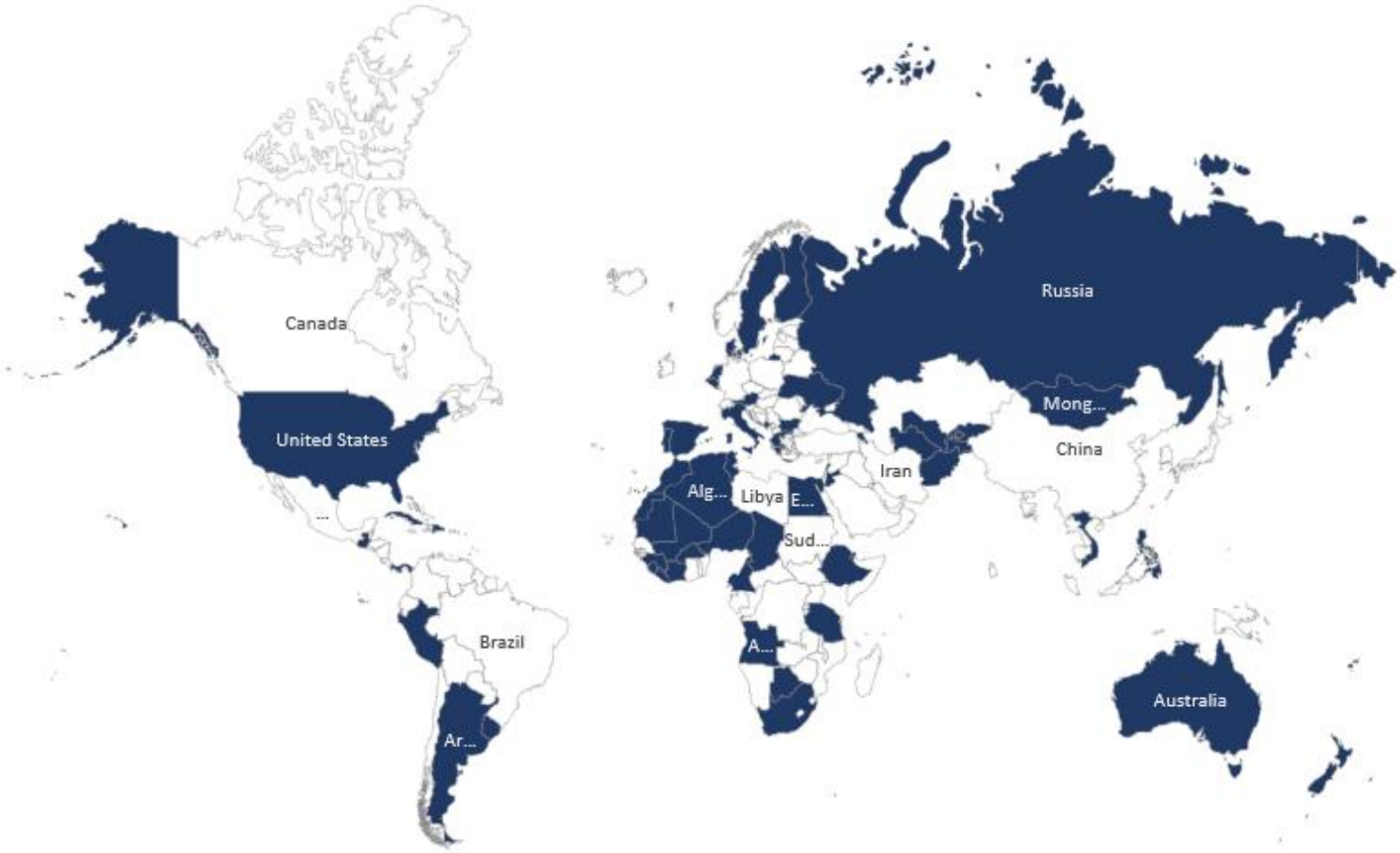
Appendix Figure A.5 – Regulations on Multi-Club Ownership

Notes: Countries that have a regulation on multi-club ownership are colored.

Online Appendix for "Protectionism, Competitiveness and Inequality: Cross-Country Evidence from Soccer" by Hakan Yilmazkuday

Appendix Figure A.6 – Existence of Collective Bargaining Agreement



Notes: Countries that have a collective bargaining agreement are colored.

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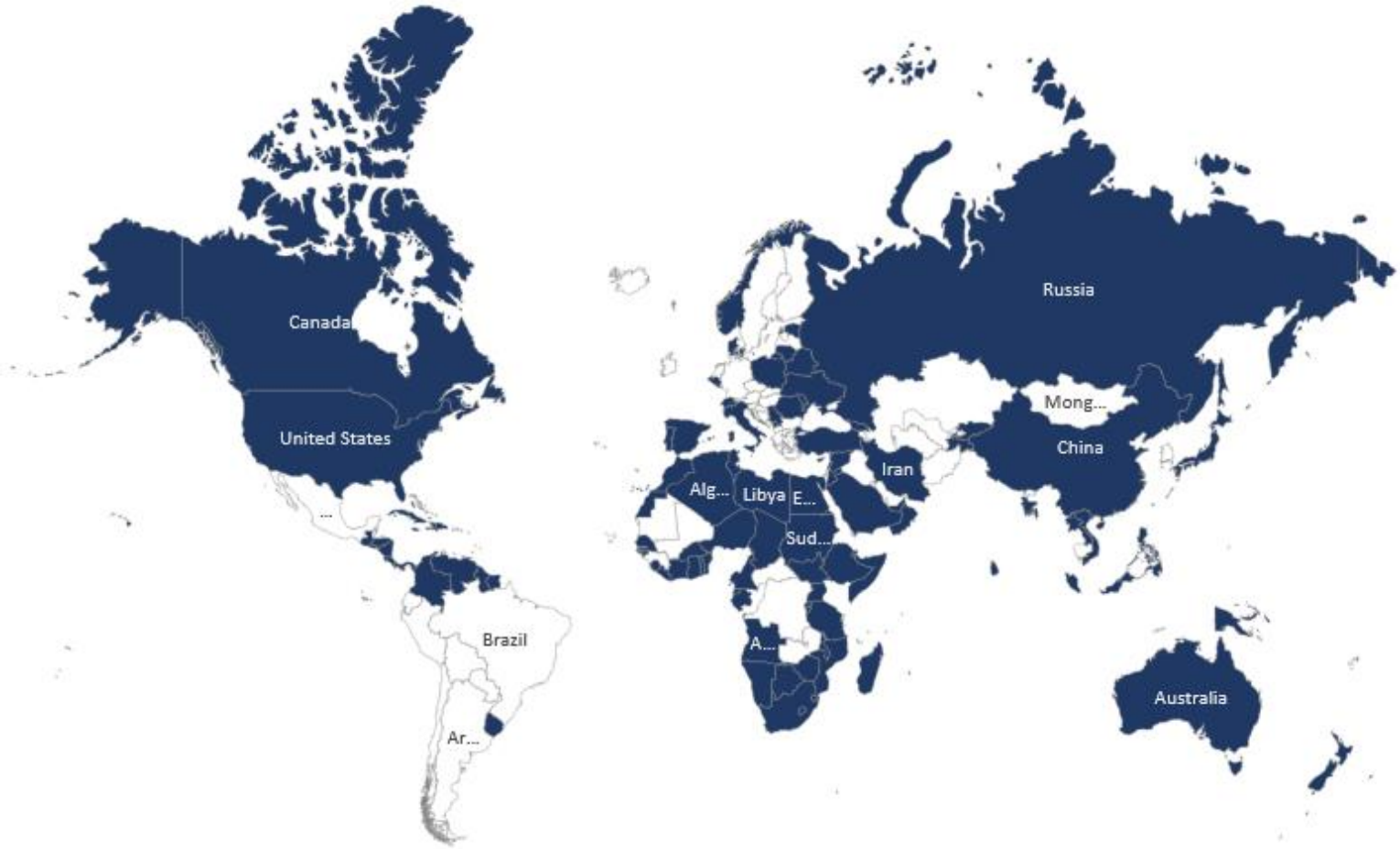
Appendix Figure A.7 – Club Licensing

Notes: Countries that have club licensing are colored.

Online Appendix for "Protectionism, Competitiveness and Inequality: Cross-Country Evidence from Soccer" by Hakan Yilmazkuday

Appendix Figure A.8 – Restrictions on Maximum Squad Size



Notes: Countries that have a restriction on maximum squad size are colored.

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Appendix Table A.1 - Descriptive Statistics

	Number of:				Ratio of:	
	Regulating Countries	Non-Regulating Countries	Regulated Clubs	Non-Regulated Clubs	Regulating Countries	Regulated Clubs
Protectionist Policies						
Restrictions on Foreign Ownership	11	62	176	823	15%	18%
Restrictions on Maximum Number of Foreign Players	52	21	735	264	71%	74%
Restrictions on Minimum Number of Home-Grown Players	27	46	374	625	37%	37%
Domestic Regulations						
Regulations on Required Legal Form of Clubs	51	22	709	290	70%	71%
Regulations on Multi-Club Ownership	41	32	569	430	56%	57%
Existence of Collective Bargaining Agreement	29	44	434	565	40%	43%
Club Licensing	68	5	913	86	93%	91%
Restrictions on Maximum Squad Size	40	33	577	422	55%	58%

Notes: Data have been obtained from the web page of Fédération Internationale de Football Association (FIFA).