

How do migrants impact the performance of teams in the English Premier League: does the composition of migrants have an effect?

Ryan Fletcher

Labour Economics

Introduction

With 503,000 people immigrating to the UK in the year ending June 2013 (Office for National Statistics, 2013), migration is a much discussed topic in the UK economy. Moreover, recent years have seen a significant rise in globalisation, resulting in firms becoming more universal (in the sense of employing a more culturally diverse workforce). Kahane *et al.* (2013) carried out a study of workforce diversity, using data from the National Hockey League, to see if foreign players had an impact on their team's success. With foreign players being a current talking point in English professional football this study will be of similar nature to that of Kahane *et al.*'s, instead, however, using data from the English Premier League (EPL) to test the impact of migrant footballers on their respective team's success.

My initial prediction would be that a large number of different nationalities could present an issue due to language and cultural differences. Yet a smaller number could be beneficial due to complementary factors as discussed in Lazear 1999a, 1999b, which is explored in more depth later in this paper.

Background to Migration in Professional Football

In 1995, the introduction of the Bosman rule¹ and the abolishment of the three-foreigner rule allowed clubs to recruit players from other countries to a greater extent than before. Likewise, it gave players the opportunity to apply their trade in other countries, thus resulting in a substantial increase in labour mobility. More recently, the presence of foreign players in the EPL has risen further. In 1999, according to Dobson and Goddard (2001), there were 185 players from outside the UK and Republic of Ireland playing in the EPL, whereas

¹ The Bosman rule allows players freedom of movement within the EU between clubs once they are out-of-contract. It was named after Jean-Marc Bosman as he sued his club as they had offered him a contract with inferior terms to his previous one, which he rejected, and then denied him permission to join another club. His case was taken to the European Court of Justice, where he won, and with that, the three-foreigner rule was dissolved. See Dobson and Goddard (2001).

today, EPL clubs employ 359 foreign players. During this time, the overall number of players in the league has actually reduced from 604 in 1999 to 527 today². Therefore, the proportion of foreign players in the EPL has risen dramatically; the freedom of mobility via the Bosman rule and the abolishment of the three-foreigner rule, along with fewer restrictions on labour mobility within the EU have allowed professional footballers to cross borders with relatively low migration costs.

The Migration Decision

This section will explain some of the underlying theories as to why workers decide to migrate, whether it is nationally or internationally. A well-known theory on this subject is “The Roy Model”. Borjas (1987) explains how income distribution and returns to human capital are linked with migration in his paper: ‘*Self-selection and the Earnings of Immigrants*’. He suggests that the rate of return to human capital is important in determining what type of workers migrate or not; skilled or unskilled. A country’s approach to rewarding skilled workers and insuring unskilled workers is what can make up the mind of a potential migrant. A highly skilled migrant that feels he/she is being under-rewarded may migrate to a country that offers a higher rate of return to human capital; this is positive selection. Conversely, a low-skilled worker may migrate to a country where they feel they are more insured against poor labour market outcomes than in their home country; this is negative selection. If it is assumed that there are no initial migration costs, then the immigration flow would look like this:

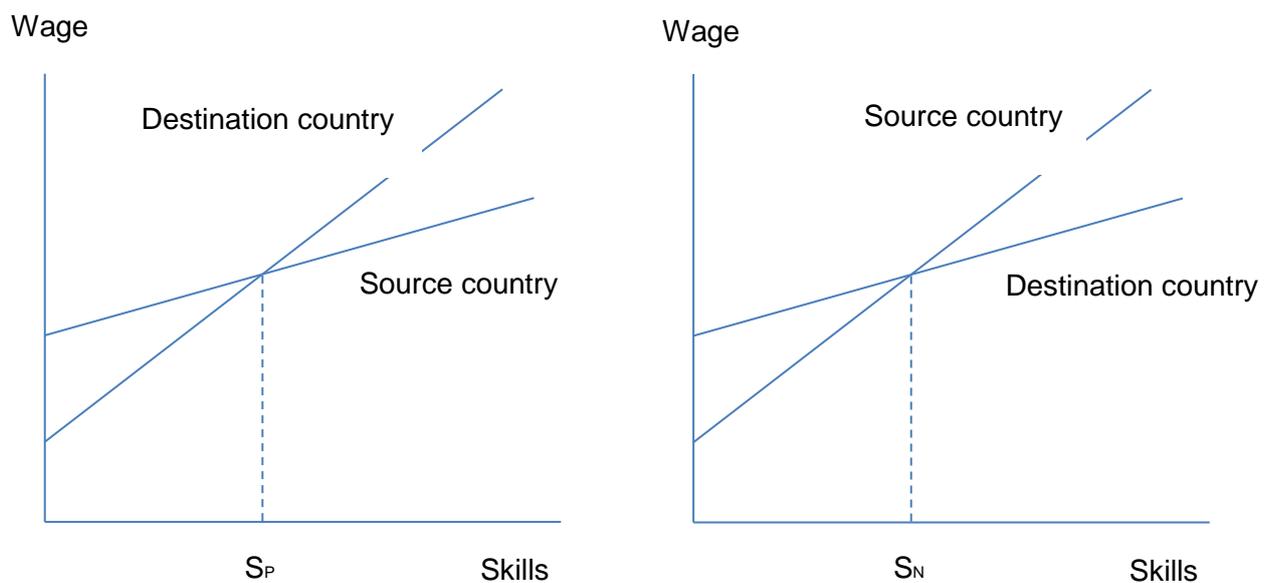


Figure 1. The Roy Model of self-selection. Source: Borjas (2013)

Figure 1 shows positive self-selection (left) and negative self-selection (right). It is clear that for positive selection, the destination country pays higher wages than the source country after point SP (a certain amount of skill; be it years of education, or talent for example). A worker would move from the source country to the destination country if they exceed this point of skills as the destination country bears higher returns to skill. The situation is the opposite for negative selection: the worker would move to the destination country if they are below the certain point of skill (SN), as this country compensates low skilled workers, for example, by having a more generous welfare system, or by presenting a lower tax burden (Borjas, 2013).

Family can also be an integral part of the migration decision due to what Mincer (1978) describes as “ties”. If the net family gain is positive, they will move. Even if one member of the family has a better employment outcome by not migrating, they go with the family as “tied mover” Likewise, someone can be a “tied stayer”, when they believe their employment opportunities are better in the destination country, but opt not to migrate as it does not outweigh the losses for the other family member(s), creating a net family loss³. This study may be relevant in the professional football industry too; the high wages in this industry may result in substantial income improvements for the player, resulting in net family gains⁴.

Additionally, migration decisions may be made with the help of friends or relatives in the form of social networks. Having previously migrated, these friends or relatives may be able to provide employment information from the destination country to the potential migrant, and refer them to their employer, increasing the job prospects of the potential migrant (Montgomery, 1991; Munshi, 2003). Montgomery (1991) suggests employers use this as a way of applicant screening, especially as they believe the current employee will only refer a capable and well-qualified friend or family member as their reputation is at stake. Furthermore, Munshi (2003) explained how the social networks can create pressure for the potential migrant; for example he studied Mexican immigrants in the USA and concluded that current Mexican migrants are encouraged to follow their community members who have previously moved to the USA. These social ties are recurrent, which can put added

³ See Mincer (1978) for his study on married couples and a more detailed explanation of net family gains, tied movers and tied stayers.

⁴ See also Sandell (1977)

pressure on members of the community to continue the migration pattern and remain in the low-level jobs that are presented to them.

Social networks in professional football may exist due to players of the same nationality being recommended by existing team members. Additionally, a manager of the same nationality may enhance the network.

The Impact of Migration

The impact immigrants have can be ambiguous. This is because immigrants can be substitutes for native workers, (i.e. they possess the same skills and compete for the same jobs as natives) or they are complementary to natives. This means that they allow native workers to specialise in certain jobs as they can more efficiently use their human capital, resulting in increased native productivity (Borjas, 2013).

Figure 2 shows this concept diagrammatically.

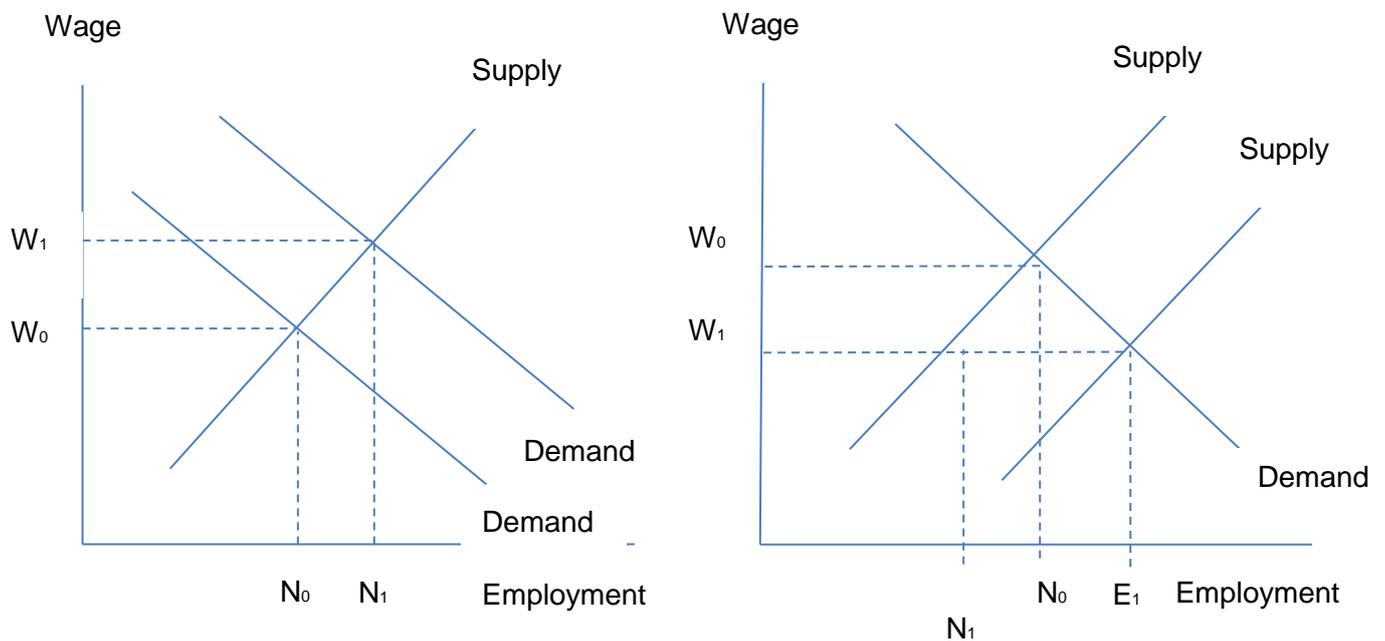


Figure 2. Source Borjas (2013)

On the left hand side of Figure 2, immigrants are complements to native workers resulting in an outward shift in the demand curve. Wages increase from W_0 to W_1 and employment for natives increases from N_0 to N_1 .

The right hand side shows a shift rightwards of the labour supply curve. This represents the native workers plus immigrant workers, which results in a decrease in the wage from W_0 to W_1 and an overall employment increase from N_0 to E_1 , however, native employment falls to N_1 .

A key question to be looked at is whether immigrants are in fact a substitute for native workers, or whether the complementary factors do increase labour productivity of natives. It is suggested that there can be costs incurred by bringing together a workforce that has different cultures, languages and legal systems (Lazear, 1999b) however, firms must feel that complementary factors do exist, to an extent to which these costs are offset. This can be emphasised when the immigrants are different from the “stock” of native workers (Borjas, 1995; Lazear, 1999b). A study carried out by Ottaviano and Peri (2005) provided evidence that “a more multicultural urban environment makes US-born citizens more productive” (p39). Their results showed that higher wages and rents for US citizens living in metropolitan areas were highly correlated with higher diversity. The reasons that they provide are simple: a taste for variety. They suggest that other cultures provide services that US citizens cannot provide, and this improves overall production. To relate this to the professional football industry, overseas players may bring with them a style of individual play that native players cannot supply, due to the way they were taught as a youngster, for example.

It is important, also, to discuss the drawbacks to a culturally diverse workforce. Firstly, language difficulties can cause communication problems amongst a workforce. Lazear (1999a) describes how minorities joining a group can bring about a new equilibrium, which is not an improvement on the former equilibrium, yet this transition does incur costs. The EPL has, over the years, had more and more foreign players apply their trade in it, and therefore some teams may be experiencing this idea of no improvement in productivity, but incurring the transition costs. Data in this study, which will be presented in the next section, will look to gain an insight into whether these overseas players do have an impact on productivity. Furthermore, the number of different nationalities is important, as the more different cultures and/or languages, would result in higher transition costs. Additionally, a study carried out by Hamilton *et al.* (2003) concludes that more heterogeneous teams perform better. High-ability team members can raise overall team productivity (which gives reason to why many football teams pay large amounts of money to buy the best players, whether they

be from overseas or not), however, they suggest that social and collaborative skills are instrumental in the mutual learning that is required for the increased productivity. A more homogenous team (i.e. one with more cultures) may not see the benefits from this mutual learning due to a lack of social and collaborative skills because of cultural and language barriers.

Another way to determine the impact of migrants is to measure the overall impact they have on the economy. Standard economic theory suggests immigration can have a positive effect on the economy by raising national income. Figure 3 shows what is known as the “immigration surplus”.

Prior to immigration, national income is given by the area ABNO. After immigration, however, labour supply shifts out to S' , putting downward pressure on wages reducing them to W_1 and increasing employment to M . Area FCMN represents the total amount of wage paid to the immigrants and the new national income is given by ACMO. Lastly, the immigration surplus is the triangle BCF, and this arises because immigrants increase national income by more than what they cost to employ (Borjas, 2013). Therefore, overseas professional footballers entering the EPL may be providing macroeconomic benefits to the UK economy.

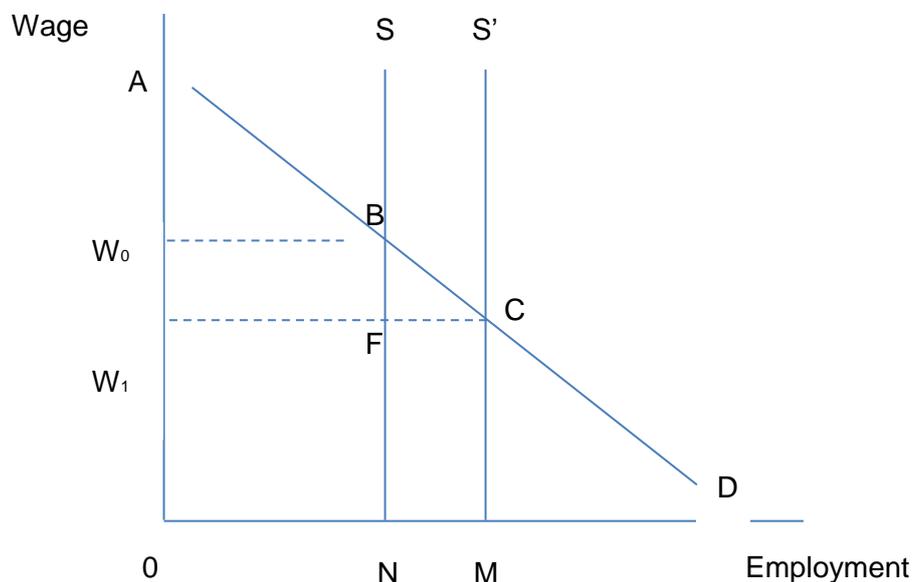


Figure 3. Source: Borjas (2013)

Data/Findings

Table 1 shows the descriptive statistics, as well as the sources of the data used in this study. The data was observed for four 38-match seasons from 2008/09 to 2011/12.

The Model

The model used to test for the effects of migration used team performance as the dependent variable, with workforce diversity as the focus explanatory variable⁵. Additionally, the average age of the team and a team quality ratio (which was the relative wage bill) were added as control variables.

Firstly, the dependent variable, team productivity, was measured by the win percentage of each team and the percentage of points gained by each team, which is standard in sports literature. Point percentage is used to assist to capture the effect of draws: in the EPL, a team is awarded three points for a win, one point for a draw, and no points for a loss.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Points %	80	16.6666666667	78.9473684211	45.5482456140	14.6309067182
Win %	80	13.18	73.68	37.0069	15.28851
Team Quality Measure	78	22372	201789	74955.60	44626.321
Team Quality Ratio	78	0.30211292298	2.51779583864	1.00000000000	0.58163755035
Average Age	80	23.29	29.90	26.5579	1.30667
Total no. of players	80	17	27	20.94	1.912
Different nationalities	80	5	17	11.00	2.619
UK	80	2	19	10.20	3.966
Africa	80	0	9	2.30	1.789
Western Europe	80	0	12	4.15	2.581
Eastern Europe	80	0	4	1.55	1.135
America	80	0	7	2.36	1.528

⁵ This model used in Kahane *et al.* (2013) is key inspiration for this study

Australasia	80	0	3	0.41	0.669
HHI	80	1966.75900277	8276.64399093	3745.56144977	1353.85456242
Relative African	80	0.0000000000	3.91304347826	1.0000000000	0.77776277478
Relative Western Europe	80	0.0000000000	2.89156626506	1.0000000000	0.62189029514
Relative Eastern Europe	80	0.0000000000	2.58064516129	1.0000000000	0.73236679452
Relative America	80	0.0000000000	2.96296296296	1.0000000000	0.64684184926
Relative Australasia	80	0.0000000000	7.27272727273	1.0000000000	1.62251022600
Relative UK	80	0.19607843137	1.86274509804	1.0000000000	0.38885429918
Valid N (listwise)	78				

Table 1. Source: Nationality data from www.transfermarkt.co.uk. Point% and win% data from www.premierleague.com. Wage data from Deloitte Annual Review of Football Finance (multiple editions).

Next, to determine workforce diversity, players were sorted into six groups of nationalities: UK (including Republic of Ireland), Western Europe, Eastern Europe, Africa, Australasia and America (including North, Central and South). Players' nationalities were determined by the national team they choose to represent, as opposed to birthplace⁶. Further, the Herfindahl-Hirschman index (HHI) was calculated by summing the squares of the shares of each nationality group, to capture their concentrations. Additionally, the relative shares of these nationality groups were calculated.

Lastly, the team quality ratio was the relative wage bill of each team for each season. The assumption was that the higher the relative wage bill, the more successful the team should be as they are paid a higher wage.

Second, the average age of the squad was used as another control variable. The assumption was that a squad that was too young or too old may have a negative impact on team productivity.

⁶ As in Kahane *et al.*'s study

Results

Table 2 shows the results across all specifications⁷. The quality ratio was, as expected, dominant in determining both win percentage and points percentage and was significant at the 1% level. This means, therefore, that if the wage bill is doubled (a unit increase in the quality ratio variable) then the percentage of points gained in a season increased by between 18.514% and 18.928%.

Next, across all specifications with point percentage as the dependent variable, the sign for the coefficient associated with average age was negative. Yet, for all specifications with win percentage as the dependent variable, the sign for these coefficients was positive. All of these coefficients, however, were statistically insignificant and so the data observed shows no evidence that the average age of the team has an impact on productivity⁸.

Moving on to the focus variables; all nationality group variables, including the relative share variables, were insignificant in all specifications. This is possibly due to the unavailability of individual wage data, so different groups could not be weighted according to their relative wage. Furthermore, the HHI coefficients were insignificant across all specifications.

Next, the number of different nationalities variable was significant to the 10% level in four specifications; the results showed that the number of different nationalities had a significantly negative relationship with team productivity. If the number of different nationalities in the team increased by 1, then points gained in a season would fall by

⁷ See Appendix for full regression analysis

⁸ A study testing the average age as a non-linear variable may be a topic of further research

	1	2	3	4	5	6	7	8
Variables	Win %	Win %	Win %	Win %	Points %	Points %	Points %	Points %
Team Quality Ratio –	19.572***	19.294***	19.433***	19.720***	18.826***	18.514***	18.581***	18.928***
Relative Wage Bill	(2.359)	(2.320)	(2.351)	(2.381)	(2.204)	(2.162)	(2.194)	(2.227)
Average Age	0.019	0.110	0.66	-0.031	-0.118	-0.027	-0.049	-0.152
	(0.851)	(0.844)	(0.854)	(0.858)	(0.794)	(0.786)	(0.797)	(0.802)
No. of Different Nationalities	-1.699*	-1.824*	-3.683	-4.160	-1.648*	-1.809*	-2.710	-3.343
	(0.984)	(0.970)	(3.957)	(3.940)	(0.919)	0.904	(3.693)	(3.685)
No. of Different Nationalities Squared			0.081	0.107			0.040	0.074
			(0.168)	(0.166)			(0.157)	(0.155)
Total no. of Players	-0.362	1.524	1.348	-0.323	-0.601	3.331	3.246	0.574
	(0.635)	(4.156)	(4.196)	(0.641)	(0.919)	(3.873)	(3.916)	(0.599)
UK %	-0.550			-0.491	-0.953			-0.913
	(0.945)			(0.953)	(0.883)			(0.892)
Africa %	-0.487			-0.476	-0.824			-0.816
	(0.867)			(0.871)	(0.810)			(0.814)
Western Europe %	-0.325			-0.296	-0.732			-0.712
	(0.940)			(0.945)	(0.878)			(0.884)
Eastern Europe %	-0.167			-0.146	-0.633			-0.618
	(0.890)			(0.895)	(0.831)			(0.837)

Americas %	-0.293			-0.281	-0.666			-0.658
	(0.877)			(0.881)	(0.819)			(0.824)
Australasia %	0.130			0.066	-0.138			-0.183
	(0.884)			(0.893)	(0.883)			(0.836)
Relative UK Share		-25.317	-22.406			-46.796	-45.384	
		(43.634)	(44.299)			(40.670)	(41.343)	
Relative African Share		-4.636	-4.441			-8.558	-8.463	
		(8.965)	(9.027)			(8.356)	(8.425)	
Relative Western European Share		-5.451	-4.746			-14.135	-13.793	
		(17.668)	(17.830)			(16.467)	(16.641)	
Relative Eastern European Share		-0.459	-0.300			-4.038	-3.961	
		(6.222)	(6.267)			(5.799)	(5.848)	
Relative American Share		-2.322	-2.141			-6.717	-6.629	
		(9.307)	(9.369)			(8.675)	(8.844)	
Relative Australasian Share		0.406	0.325			-0.140	-0.179	
		(1.643)	(1.661)			(1.531)	(1.550)	
HHI	0.000	0.000	-0.001	-0.001	0.000	0.001	0.000	0.000
	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	0.002	(0.002)

Table 2. Regressions ran using SPSS.

between 1.648% and 1.809%. Likewise, the win percentage would fall between 1.699% and 1.824%. This reflects the costs that can be incurred through a diverse workforce (Lazear, 1999a, 1999b; Hamilton *et al.*, 2013). However, when the different nationality squared term was introduced, in an attempt to capture a non-linear relationship, the coefficients were insignificant. The signs for the different nationality and squared different nationality variables were negative and positive, respectively, suggesting a non-linear relationship. Yet these variables were not statistically significantly different from zero.

Discussion

The main objective of this study was to observe the impact of migrants in the EPL. A crucial element of the theory of the impact of migration is whether immigrants are complements or substitutes for native workers. Currently, many professional footballers, former professional players, managers and members of footballing governing bodies are debating the effect foreign players have in the league. It is thought that by having too many foreign players, the opportunities of British (with focus on English) players are hindered, which is having a negative impact on the national team. Whether this notion is reflected in wages or in the number of British professional players in the EPL is perhaps a potential topic for further research. This study sought to test the impact of immigrants, with emphasis on how the composition affected team performance. The data suggested that a larger number of different nationalities within a team can impact negatively on team success, suggesting that more heterogeneous teams are more successful and culture and language barriers do hinder team performance, reflecting Hamilton *et al.*'s (2013) study. However, when a squared term of the different nationalities variable was added, the coefficients associated became statistically insignificant, rendering the outcome somewhat inconclusive. A larger data sample, covering more seasons, may have seen the number of different nationalities have a more robust significance. A possible reason for the lack of robustness could be due the fact the market for foreign players in the EPL has matured. That is, as the number of foreign players has been high for a number of years now, the workforce equilibrium has shifted to a more diverse one. If, perhaps, the study was performed during an earlier period when the market was not as mature, nationality variables as well as the number of different nationalities may have had a significant and robust impact.

Moreover, to analyse whether or not the foreign players in the EPL complement native players is an ambiguous concept. Although the coefficients were insignificant when the squared term of different

nationalities was introduced, the signs for the two variables were different⁹, which suggested that the number of different nationalities has a negative relationship with team success up to a certain point, where it becomes a positive relationship. This contradicted the idea that a small number of different nationalities may complement the workforce; instead it suggested that once there was a certain amount different nationalities in the team, each extra nationality would have a positive impact. A possible reason for this is that it requires a certain number of nationalities within a team for them to become complementary to one another, and below this number, they are substitutes. As suggested by Lazear (1999a), teams may incur transition costs via migration that does not improve its equilibrium productivity. This could be another opportunity for future study; again, using an earlier and larger data set may capture the labour market for foreign players at a time when it was less mature, and the insignificant relationship found in this study may prove to be significant. These potential results would then agree with literature suggesting native workers benefit from more diverse workforce (Ottaviani and Peri, 2005; Lazear 1999b).

The existence of social networks would perhaps need data collected over a longer period of time, in order to assess any herding behaviour as suggested by Munshi (2003). However, this data does show signs that social networks do exist in professional football. An example is Arsenal FC: the data shows that for three of the four seasons observed, Arsenal had a league high of six French players, as well as a French manager. This perhaps shows signs of a social network. These players may have had links as they were growing up and learning their trade; played together in France at various stages of their lives; or played together internationally and once one or two were at Arsenal, others followed, whether it be via referrals as suggested Montgomery (1991) or whether the remaining players actively sought a move to there. This information is beyond the scope of the data collected in this study, thus this can only be speculation, however, this may be potential evidence of a social network in professional football.

As previously stated, the Roy Model is a key theory behind the migration decision. The data collected in this study showed the income distribution across the teams in the EPL, with the Team Quality Measure variable. However, due to the unavailability of data, it cannot show how the income is distributed within the teams, and so it is unknown how total wage bill is split between nationalities or groups of nationalities. If this data was available, it would enable the observation of how teams value these different (groups of) nationalities. Furthermore, this would allow the Roy Model's theory to be tested; by knowing how much each player (nationality) was being paid, the Roy

⁹ See Table 2

Model's theory of self-selection could be tested by using a cross-country comparison because the returns to human capital (or talent in this case) could be compared.

The data in this study cannot capture any macroeconomic impact immigrants have on the UK's economy. However, it is important to note the huge success and popularity of the EPL, of which foreign players are an imperative part. The increasing global interest of the EPL has caused revenue to increase to £2.3 billion in 2011/12 from just £170 million in 1991/92 and the tax contributed by English professional football in 2011/12 was £1.3 billion (Deloitte Annual Review of Football Finance, 2013). The EPL has a significant impact on employment, GDP and national and local economies¹⁰. As previously mentioned, 185 foreign players were employed by EPL teams in 1999; at this time, the revenue of the league was approximately £669 million¹¹. With revenue increasing dramatically, so too has the number of foreign players. Without them, would the EPL be as globally popular and as beneficial to the UK economy? An extremely interest topic for further research could be to test the extent to which foreign professional football players create an immigrant surplus, as discussed earlier in this paper.

Conclusion

In conclusion, this study has found some evidence of a negative impact from immigration on team's success in the EPL. However, the professional football labour market for foreign players may have matured to an extent to which the new equilibrium labour workforce is relatively diverse. The results of this study showed that, as expected, the relative wage bill of each team was dominant in determining the respective team's productivity, measured by win percentage and percentage of points gained over a 38-game season. An important finding was that for four specifications, the number of different nationalities within a team had a significantly negative relationship with productivity (point percentage and win percentage). If there was one extra different nationality in the team, the team gained 1.648% less points or won 1.699% less games in the season. This shows that cultural differences and language barriers do have an impact on team success, as discussed in Lazear (1999a, 1999b). However, these results are not robust. The impact of the composition of migrants in a team is not shown in this data sample; no one group of nationality has proved to significantly have a positive (or negative) impact on team productivity, nor has the relative share of these groups. There is some evidence for the existence of social networks, largely from Arsenal – as a possible French network may exist within the team. Lastly, due to the limitations of the data

¹⁰ See House of Lords Library Note (2013) and Boyce (2011)

¹¹ See Dobson and Goddard (2001)

available, it is impossible to say whether foreign players enter the league due to positive self-selection as predicted in the Roy Model.

Bibliography

Borjas, G. (1987). Self-Selection and the Earnings of Immigrants. *American Economic Review*. 77 (4), p531-553.

Borjas, G. (1995). The Economic Benefits from Immigration. *Journal of Economic Perspectives*. 9 (2), p3-22.

Borjas, G (2013). *Labor Economics*. 6th ed. New York: McGraw-Hill. P318-366.

Boyce, L. (2011). *Are footballers good for the economy? Premier League tax to deliver £1bn this season.*

Available : <http://www.thisismoney.co.uk/money/news/article-2032122/Are-footballers-good-economy-Premier-League-tax-1bn-UK-season.html>.

Last accessed 12th Jan 2014.

Deloitte Annual Review of Football Finance (multiple editions)

Dobson, S. and Goddard, J (2001). *The Economics of Football*. Cambridge: Cambridge University Press.

Hamilton, B., Nickerson, J. and Owan, H. (2003). Team Incentives and Worker Heterogeneity: An Empirical Analysis of the Impact of Teams on Productivity and Participation. *Journal of Political Economy*. 111 (3), p465-497.

House of Lords, Library Note. (2013). *Debate on 25 July: Contributions of English Premier League Football to the United Kingdom*. (LLN 2013/022)

Kahane, L., Longley, N. and Simmons, R. (2013). The effects of 16thhold16 heterogeneity on firm-level output: assessing the impacts of cultural and language diversity in the National Hockey League. *The Review of Economics and Statistics*. 95 (1), p302-314.

Kleven, H., Landais, C. and Saez, E. (2013). Taxation and International Migration of Superstars: Evidence from the European Football Market. *American Economic Review*. 103 (5), p1892-1924.

Lazear, E. (1999a). Culture and language. *Journal of Political Economy*. 107 (6), S95-S126.

Lazear, E. (1999b). Globalisation and the market for team-mates. *Economic Journal*. 109, C15-C40.

Mincer, J. (1978). Family Migration Decisions. *Journal of Political Economy*. 86 (5), p749-773.

Montgomery, J. (1991). Social Networks and Labor-Market Outcomes: Toward an Economic Analysis. *American Economic Review*. 81 (5), p1408-1418.

Munshi, K. (2003). Networks in the Modern Economy: Mexican Migrants in the U. S. Labor Market. *Quarterly Journal of Economics*. 118 (2), p549-599.

Office for National Statistics. (2013). Migration Statistics Quarterly Report, November 2013. *Statistical Bulletin*.

Ottaviano, G. and Peri, G. (2006). The economic value of cultural diversity: evidence from US cities. *Journal of Economic Geography*. 6, p9-44.

Sandell, S. (1977). Women and the Economics of Family Migration. *The Review of Economics and Statistics*. 59 (4), p406-414.

Sloane, P. (1969). The Labour Market in Professional Football. *British Journal of Industrial Relations*. 7 (2), p181-199.

Transfer Markt. Available: <http://www.transfermarkt.co.uk/>. Last accessed 15th Jan 2014.

The Official Website of the Barclays Premier League. Available : <http://www.premierleague.com/en-gb/>. Last accessed 15th Jan 2014.