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The Economic Effects of ‘Muscle Drain’ in Sport

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Introduction

I am used to talking about ‘muscle drain’ (Andreff, 2001 & 2004) rather than ‘feet-drain’, though it is the same topic.

The brain is a muscle as well: the background reference is ‘brain drain’ in the international migration theory or international mobility on a globalised labour market for talents.

My contention: both nations (including national squads) and players may loose while European and North American professional sport clubs and players’ agents do win.

In the ‘muscle drain’ business, private gains prevail over general interest.

Some more regulation of this business is required to have losers compensated by the winners and, beyond the FIFA rules, I have my own recipe: a so-called ‘Coubertobin tax’. Since it is not a panacea, it must be compared and possibly combined with other tools to handle the most detrimental effects of ‘muscle drain’.
1. The muscle drain: some empirical evidence

First significant international player (athlete) transfers trace us back to the 1950s with, for instance in soccer, foreign superstars who moved to Real Madrid (Kopa, Puskas) while a number of Dominican players started to join the MLB

Globalisation of the labour market for talents boosted the international muscle migration: the Bosman case (1995) in European football, extended to other sports and countries with Malaja, Kolpak and Simutenkov cases; the Cotonou agreement (2000)

Muscle drain: a/ across developed market economies (EU + NA), i.e. ‘North-North’; b/ from developing to developed countries (‘South-North’); c/ teenage player transfers

A/ North-North international mobility

After Bosman case, international mobility of soccer (European football) players had swiftly increased: example, the number of foreign players in the 5 major European Leagues (Table 1)
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<tbody>
<tr>
<td>England</td>
<td>34</td>
<td>34</td>
<td>37</td>
<td>56</td>
<td>55</td>
</tr>
<tr>
<td>France</td>
<td>18</td>
<td>18</td>
<td>22</td>
<td>36</td>
<td>36</td>
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<tr>
<td>Germany</td>
<td>19</td>
<td>27</td>
<td>39</td>
<td>50</td>
<td>41</td>
</tr>
<tr>
<td>Italy</td>
<td>14</td>
<td>17</td>
<td>33</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Spain</td>
<td>20</td>
<td>29</td>
<td>40</td>
<td>28</td>
<td>32</td>
</tr>
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</table>
On average in the 5 leagues: 38.7% of foreign players (Loïc Ravenel, Raffaele Poli), i.e. 277 players, 50.2% of which from European countries, 82 from France, 41 from the Netherlands, 38 from Portugal, 34 from Denmark, etc. = North-North flow

In 2007-08, 196 foreign players, nearly two-thirds of all players, are in operation in the English Premier League flowing from 66 different countries (only 23 foreigners in 1992 when the Premier League was created)

In European soccer, from 1995 to 2005, the average number of foreign players per team has increased from 4.8 to 9.8; Arsenal played the Champions League final 2005 with only two British players on the pitch and has today just Theo Walcott as a good English player in its team; see also Chelsea, Manchester U., Barcelona, Real Madrid, etc.

The other side of the coin: during the soccer World Cup 2006 among the 736 players selected in all national squads, 392 (53%) were playing abroad (all the Ivory Coast team, 13 players in the French team)

In North-North muscle drain some countries are net importers (England, Spain, Germany) other are net exporters (France, Belgium, Portugal, Denmark)
**B/ South-North flows: the crucial facet of muscle drain**

Nearly half of foreign players operating in the five major soccer leagues are from developing countries (DCs); this percentage increases if we go down to some second rank leagues (Belgium, Portugal, etc.) and to second, third divisions in major European soccer countries. In French *Ligue 1* and *Ligue 2*, 50% of foreign players are from African countries.

It is a net South to North flow: in France, 13 (out of 45) foreign players who entered the *Ligue 1* in 2007-08 are from DCs while only 3 (out of 54) foreign players who had moved abroad have left for a DC = net inflow from the South.

1989-1997: 2084 Brazilian football players migrated to foreign clubs; they were 654 in 2002 up to 857 in 2004 (Table 2). Hundreds of African players per year and other Latin American players.

We witness the same sort of muscle drain to North America: 1300 Dominican players in the MLB, a number of African and Latin American players in the NBA, a number of Russian and Czech players in the NHL, etc.
Table 2 - Transfers of Brazilian soccer players abroad

<table>
<thead>
<tr>
<th>Moving to:</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
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</thead>
<tbody>
<tr>
<td>Total number</td>
<td>654</td>
<td>787</td>
<td>857</td>
</tr>
<tr>
<td>Moving to:</td>
<td>Nb</td>
<td>%</td>
<td>Nb</td>
</tr>
<tr>
<td>Europe</td>
<td>365</td>
<td>55.8</td>
<td>454</td>
</tr>
<tr>
<td>Portugal (1st destination)</td>
<td>141</td>
<td>21.6</td>
<td>141</td>
</tr>
<tr>
<td>Asia</td>
<td>94</td>
<td>14.4</td>
<td>128</td>
</tr>
<tr>
<td>South America</td>
<td>80</td>
<td>12.2</td>
<td>71</td>
</tr>
<tr>
<td>Africa</td>
<td>53</td>
<td>8.1</td>
<td>65</td>
</tr>
<tr>
<td>North-Central America</td>
<td>60</td>
<td>9.2</td>
<td>67</td>
</tr>
<tr>
<td>Oceania</td>
<td>2</td>
<td>0.3</td>
<td>2</td>
</tr>
</tbody>
</table>
Since the late 1980s, transition economies (Central Eastern Europe and the former USSR -FSU) became significant athlete ‘exporting’ countries, which compare (and compete) with DCs. Ex.: 1990-1997, 600 professional football players, 520 ice hockey players, 300 handball and volleyball players, 100 ice skaters and 20 coaches moved abroad from the FSU

The other side of the coin: DCs’ national squads comprise of many players whose domestic team (club) affiliations are outside their home domestic league: exhibited in Table 3 for the 5 African teams that qualified for the 2002 World Cup (only 21% of the players affiliated in their home domestic league). The same applies to those participating to the African Cup of Nations

C/ Teenage player transfers (below 18)

The most outrageous (and now outlaw) muscle drain (forbidden by the FIFA rules since 2001)

This new trend emerged in the 1980s, but it was boosted by globalisation of the market for talents
Table 3 - Geographic Distribution of Domestic Team Affiliations, African 2002 World Cup Players

<table>
<thead>
<tr>
<th>Domestic Team Affiliation</th>
<th>Cameroon</th>
<th>Nigeria</th>
<th>Senegal</th>
<th>S. Africa</th>
<th>Tunisia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home country</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>Africa</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>England</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>France</td>
<td>7</td>
<td>3</td>
<td>20</td>
<td>-</td>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td>Germany</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Italy</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Spain</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Other European</td>
<td>3</td>
<td>11</td>
<td>1</td>
<td>10</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>Rest of World</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>115</td>
</tr>
</tbody>
</table>

Source: Gerrard (2002).
In the 1990s, 4809 foreign players, aged from 6 to 16, originating from Latin American and African countries were found in Italian soccer clubs.

In the Netherlands, 33 soccer clubs have been sued by the immigration office for illicit importation of 26 Latin American and African players below 18.

Belgian clubs are utilised as ‘nursery hubs’ for training African players before their transfer to major European leagues; in 2000, 15 young African players lodged a complaint in the Belgian court against professional clubs and player agents, complaining about a ‘trade of human beings’ … and eventually won.

Often spotted by player agents at the African Cup (nicknamed ‘the cattle fair’) teenage players are invited to be tested in European clubs; when the test is unsuccessful, they are abandoned by both clubs and player agents without a labour contract and a return ticket to their home country, thus considered *de facto* as illegal migrants.

Some cases were so outrageaous that the French Minister was struck and ordered a report (Donzel 1999) which confirmed the existing extremely bad practices of clubs and players’ agents towards teenage African players.
FIFA regulation (2001, art. 19) came up with the statement that ‘international transfer is allowed only if the player is at least 18’ with three exceptions that open the door to the regulation being circumvented (parents moves, within the EU, living close to the border of a foreign country)

Teenage muscle drain has not vanished yet, though it is less publicised (being illegal), but one can find some cases still reported in the press; ex.: end of 2002, Isa Mohammed’s (Nigeria) transfer to a Polish club (1st division), supposed to be a rocket pad toward a career in a major European league, then injured and abandoned

**D/ The tip of the iceberg: changing citizenship (naturalisation)**

A (small) share of international flows of talents comes out with a player demand for changing his/her citizenship, i.e. the most visible and tricky part of muscle drain

The number of naturalised citizens in the national squads competing at Athens Olympics was 9 in the Canadian and Italian teams, 12 in Germany, 13 in Australia and the USA, 16 in Israel, 28 in Greece, 29 in France (out of which 22 from DCs and 6 from transition economies, see Andreff 2006)
R. Poli & P. Gillon (2006) provide an overall view: 270 naturalised athletes at the Athens Games, 41 from Africa, 43 from Asia, 57 from America, 120 from Europe were selected in national squads of European countries (187), America (35), Asia (25), Oceania (17) and Africa (5)

A forthcoming issue: what would be the meaning of a national squad if the Qatari strategy (swift naturalisation of Africans, etc.) spreads throughout the world?

2. The economic determinants of the muscle drain

A topic not much covered in the economic literature so far

Some determinants are non economic: athletes with a double citizenship (from birth), opportunity to be selected in a (weaker) national squad of a foreign country, parents international relocation for reasons not linked to sport

Determinants are increasingly economic:
A/ North-North muscle drain

Wage differentials across sports in developed market economies:
Average monthly wage in France = €44000 soccer *Ligue* 1 (€11000 *Ligue* 2); €12500 cycling Pro Tour; €7000 basket A (1st division); €6500 rugby Top 14; €1500 track and fields *Ligue* Pro
France is more or less attractive to muscle drain depending on the sport discipline

Wage differentials across developed market economies in the same sport:
In English soccer Premier league = €145000, English second division = €45500 (> than the French *Ligue* 1), this explains why so many French players in English clubs, and so few English players in French clubs

Those wage differentials are due to clubs revenues (gate receipts, sponsors, TV rights, merchandising, naming) differentials. Chelsea can afford a €190 million payroll, 70% of the overall payroll of the whole French *Ligue* 1 (€268 million)
Moving from OL to Chelsea, Malouda increased his annual wage by 52%, Faubert by 97% (Bordeaux to West Ham), Kaboul 214% (Auxerre to Totenham), Abidal 54% (OL to Barcelona), Mavuba 122% (Bordeaux to Villareal), Ribéry 94% (OM to Bayern M)

A secondary determinant is the league regulation and its impact on a more or less balanced competition (competitive balance); the more unbalanced, the more a move to a top club of the (Spanish, Italian, the most unbalanced) league will translate into wins, including in the Champions League, and then into an increased player revenue (including bonuses, sponsorship contracts, etc.) and an increased value of his human capital (i.e. talent) which would materialize in a next more profitable international transfer

A tertiary determinant may be the overall economic regulation of a home or host country, ex.: the heavier French taxation of high individual revenues (a ‘push’ factor Abroad contrasting with the two above mentioned ‘pull’ factors from abroad)
B/ South-North muscle drain

Here is a deep (monthly) wage gap: in the Brazilian soccer league 1 = about €12000, in African leagues, sometimes below €2000, seldom over €5000

Second determinant, economic underdevelopment (more details in Andreff 2001): low rate of physical education, low rate of sport participation, shortage of teachers and trainers, low domestic financing of sport, limited sport facilities and equipment, fewer world-level sport performances, namely Olympic medals (than in developed countries), few world sport events hosted, widespread corruption in sport, wage arrears in professional clubs if any

Therefore, moving to the North means better training conditions, better technologies (medical care, sport equipments, etc.), better expectations to win at a world level, stronger athletes to compete with…

… and an access to a better standard of living and purchasing power

The same factors apply to teenage muscle drain + the ‘dream of a personal achievement as a future superstar player’ in the North, fuelled by unscrupulous players’ agents
3. Effects on the host country’s sports economy

For the transferred players, whenever successful, better wage and revenues, better way of life. Otherwise, left aside by the host club or resale on the market or abandoned (teenagers)

For the clubs:
1/ they become transnational corporations, sampling together players (manpower) from different countries (also coaches, fans, sponsors, medias from various countries)

2/ they provide sport shows and events of better quality due to their recruitment of good players/athletes abroad and increase their probability to win on the field; consequently they attract more money from fans, sponsors, medias, etc.

3/ earning more money, they are capable to recruit more (or the best) international superstars, which prolongs the capacity to win, to earn money, etc.
   = winners’ ‘virtuous circle’

4/ in some cases, they finance nursery clubs or networks in DCs to supply a stable ‘inflow of cheap muscles’ in the years to come
For the league (ex. soccer): a possible deficit in the transfer balance which can jeopardise the league financial equilibrium (French Ligue 1, early 2000s)

For the player agents: the more transfered players, the bigger their revenues (a percentage of the transfer fee and/or initial wage)… cheating on the players dates of birth and their names… thence a risk to fuel even more the bung culture (bribes, embezzlements) pointed at by Lord Stevens report (2006), since most player agents are unregistered and thus not supervised by the FIFA (to some extent ‘outlaw’); sometimes a conflict of interest emerges when there are tight links between club managers and player agents

For the host country, overall:
Having high level domestic competitions without having financed the cost of education and training the foreign athletes/players involved

Enjoy good clubs and teams winning international competitions (ex: Champions League)

A possible ‘windfall cost’ with the national squad (ex. the English soccer squad unable to qualify for the final stage of the Euro 2008)
Here again, regulation comes to the fore, since a host country can maintain:
. either rather liberal (or ‘lax’) rules about education and training of domestic players (England) with the aforementioned consequence on the national squad
. or tightly regulate: each French soccer Ligue 1 club is required to finance and run its own educational and training centre (the result is rather good performances of the national squad and export of French superstars abroad while domestic clubs underperform in European competitions and have to import foreign players as well)

4. Effects on the home country’s sports economy

The main issue (more in DCs than accross developed countries): the home country and/or the nursery club are not compensated enough for education and training costs of transferred players (ex.: the Dominican minister for sports complaining of no return from hundreds of migrant baseball players in the MLB to cover his costs)

This deepens the gap between DCs and developed countries sports economies and undermines the sporting substance of DCs, their expectation and chance to win
*National squads* are often weakened by European or American clubs reluctance to release their foreign (Third World) players, which erodes the home country’s capacity to use its most talented athletes in international competitions. And when they are released, the national squad is less and less national in some sense (most players are expatriate workers).

*Professional clubs and leagues* in DCs remain poor, underdeveloped and unable to keep their best players or to get a reasonably high price for them on the global market.

Home countries, overall = loosers

In the background of this business, the economic issue is one of losers’ (home countries) compensation by the winners (basically located in host countries).

5. **What is to be done?**

In the face of comparable issues as regards to international mobility on the globalised capital market, James Tobin, a Nobel Prize winner in Economics suggested to ‘throw sand in the wheels of international finance’ and designed a 1% (Tobin) tax to put a brake on short term capital movements – never implemented so far.
My own recommendation is thus to introduce a so-called ‘Coubertobin’ tax on international player transfers in order to:

. cover extensively the education and training costs of home countries  
. slowdown the muscle drain from DCs to professional player markets in the North  
. provide a strong disincentive to transfer teenagers or even children  
. accrue revenues to a fund for sport development in home countries (financing sport facilities building and maintenance, training, widespread sport practice for all)

Levy a tax at a 1% rate on all transfer fees and initial wages agreed on in each labour contract signed by players from DCs with foreign partners  
Levy a graduated tax surcharge on transfers of teenage and very young talents, the younger the player (see the model) the higher the surcharge

It is not a panacea, unresolved issues are: which body to levy the tax and take over the tax administration? A necessary international agreement host/home countries (federations). Political willingness seems to be missing
The model of a Coubertobin tax

\[ FR = (Pi - r.Vl) \cdot T, \text{ if } a > a1 \]  
\[ FR = (Pi - r.Vl) \cdot [T + s1 (a - a1)], \text{ if } a1 < a < a2 \]  
\[ FR = (Pi - r.Vl) \cdot [T + s2 (a - a2)], \text{ if } a2 < a < a3 \]  
\[ FR = (Pi - r.Vl) \cdot (T + s3), \text{ if } a < a3 \]

\( FR \): revenues raised through the taxation for the home DC  
\( Pi \): international transfer price (fee) + initial annual wage of the transferred player  
\( Vl \): player’s value on the home country market  
\( r \): exchange rate between the domestic currency and the hard currency of the host country  
\( T \): Coubertobin tax at a uniform rate of 1% for all transferred players  
\( s \): tax surcharge for players under 18;  
\( a \): player's age at the date of transfer;  
\( a1 \): first age threshold below which a tax surcharge is to be paid;  
\( a2 \): second age threshold below which the tax surcharge must be deterrent  
\( a3 \): third age threshold below which the tax is prohibitive on transfers of extremely young players.

Example: \( a1 = 18 \) years, \( a2 = 14 \) years, and \( a3 = 10 \) years  
if \( a1 < a < a2 \), the tax surcharge \( s1 = 2\% \) more for each month under the age of 18 at the date of transfer; transferring a player of 16 costs a 48\% surcharge  
if \( a2 < a < a3 \), the surcharge \( s2 = 10\% \) more for each month below the age of 14 at the date of transfer; transferring a player of 12 costs a 240\% surcharge  
if \( a < a3 \), the surcharge \( s3 = 1000\% \) lump sum tax
Other regulation options:

**FIFA rules:** 1/ teenager transfers forbidden (creates an international ‘black market’) 
2/ training costs compensation for players transferred over 23 with a 5% solidarity mechanism distributed on a *pro rata* basis among nursery clubs (from 12 to 23) 
Comparison with the tax: more profitable over 23, much less below 18; main hindrance: restricted to soccer (my tax targets all sports with international transfers), however FIFA rules consist in a step forward in the good direction

*A 5% tax on all player transfer fees* supported by a French MP, Guy Teissier, to finance sport facilities and sport practices in ‘hot suburbs’, not confined to international transfers

**Quotas of domestic players** (comeback to pre-Bosman): 5 foreigners + 6 domestic (FIFA discussion, Platini, applied in Russia), at least 4 locally trained players, then 6, then 8 players in UEFA competitions since 2006-07, 50% of Italian players in Calcio Matches, a quota of ‘locally trained players’ for 2009 (discussed at the French rugby Top 14); the concept of ‘locally trained player’ is blurred

*A gentlemen agreement* (international chart of solidarity football) between clubs committing themselves to good recruitment and transfer practices, supported by the French association *Culture foot solidaire* (wishful thinking? efficiency?)
Finally, the Andrew Webster case at the Sport Arbitral Court, is a U turn compared to Bosman case, since it allows a player (considered as a ‘free agent’), breaching his labour contract before the deadline, to obtain a compensation not higher than cumulative wages until the end of contract (sounds like previous transfer fees).

All those restrictions (i.e. market protection) will come under the fire of the European Court of Justice, since they circumvent the Bosman jurisprudence on labour mobility.

**The most urgent regulation:** supervision of the players’ agent business

FIFA rules: an agent must exhibit a clean police record, must not be an attorney, must pass an interview with his domestic soccer federation and make a deposit in Swiss Francs, this regulation must be more tightly supervised in practice…

…but the main tricky issue is to phase out illicit transactions by non registered agents. Forbidding affiliated clubs (to federations) to deal with outlaw players’ agents? Is an efficient supervision feasible?

Creating an international association of players’ agents on the model of the Bar (association of barristers) which would define and supervise honorariums and fees and rule the whole agents business? A reform that requires political willingness again.
References:


