The CIES Football Observatory

Demographic analysis of European football

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Congreso Internacional Futbol y tecnología
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Contents

• About CIES Football Observatory
• European Overview
• Trends per National Leagues
About CIES Football Observatory
About CIES Football Observatory

- The International Centre for Sports Studies (CIES) is a private foundation affiliated to the University of Neuchâtel (Switzerland)
- The CIES Football Observatory was set up in 2005 by Drs. Raffaele Poli and Loïc Ravenel under the name of Professional Football Players’ Observatory (PFPO)
- Since 2011, it is one of the cornerstones of the vast CIES Observatory project, dedicated to the statistical analysis of sport in all its diversity.
About CIES Football Observatory

- Our original goal has been to analyse year by year the latest trends in the labour market of professional footballers from an international perspective.

- For that, we have developed perfectly comparable statistical indicators on issues such as age, height, experience, training, origin, mobility, contracts, etc.
About CIES Football Observatory

- Since 2010, a partnership with Opta has allowed us conceiving performance indicators correlated to results to objectively measure and compare players’ on-pitch productivity

- We have also developed statistical models to explain and forecast team results according to the characteristics of players in the squad

- Elaborate researches on Football for several organizations (FIFA, UEFA, National Federations, Clubs, ...) in the global field of international comparisons
A website allowing registered users to interactively depict some of our demographic indicators and our activity: [www.eurofootplayers.org](http://www.eurofootplayers.org)
Two yearly publications

Annual Review of the European Football Players’ Labour Market (big-5 leagues), since 2006

Demographic Study of Footballers in Europe (33 top division leagues), since 2009
European Overview
The Leagues

- 33 top division leagues
- 500 teams
- 12,410 players
- Only the players who played a match since the beginning of the season (except the GP).
The indicators

- **Age**
  - Experience
  - Physical Performance

- **Height**
  - Technical skills
  - Formation System

- **Club-trained**
  - Formation System
  - Impact on National Team

- **International Activity**
  - Quality of players
  - Experience

- **Expatriate**
  - Internationalisation
  - Recruitment policies

- **New Players**
  - Turnover
Average Age

Average age, by position

![Bar chart showing average age by position]

Average age, by continental area

![Bar chart showing average age by continental area]
Average Height

Average height, by age

Average height, by league
% club-trained

% club-trained, by league level

<table>
<thead>
<tr>
<th>Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>top</td>
<td>17.3%</td>
</tr>
<tr>
<td>large</td>
<td>14.6%</td>
</tr>
<tr>
<td>med</td>
<td>21.6%</td>
</tr>
<tr>
<td>small</td>
<td>25.3%</td>
</tr>
<tr>
<td>micro</td>
<td>29.6%</td>
</tr>
</tbody>
</table>

% club-trained, by continental area

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>31.0%</td>
</tr>
<tr>
<td>Centre</td>
<td>29.6%</td>
</tr>
<tr>
<td>West</td>
<td>20.0%</td>
</tr>
<tr>
<td>East</td>
<td>17.8%</td>
</tr>
<tr>
<td>South</td>
<td>15.5%</td>
</tr>
</tbody>
</table>
Trends per National Leagues
Typologie of the Leagues

- **Spain**
  - “Small” and talented players

- **Russia, Ukraine, Poland**
  - Importing players to improve success
  - Decline of the youth training

- **Denmark, Sweden, Croatia**
  - Development of the young talents

- **Bulgaria, Romania**
  - Football in crisis
Spain: demographic trends

Average age

<table>
<thead>
<tr>
<th></th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26.71</td>
<td>26.61</td>
<td>26.51</td>
</tr>
<tr>
<td></td>
<td>25.95</td>
<td>25.94</td>
<td>25.82</td>
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</table>

% active internationals

<table>
<thead>
<tr>
<th></th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21.8</td>
<td>21.2</td>
<td>23.0</td>
</tr>
<tr>
<td></td>
<td>13.6</td>
<td>14.7</td>
<td>14.4</td>
</tr>
</tbody>
</table>

Average height

<table>
<thead>
<tr>
<th></th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>181.85</td>
<td>181.99</td>
<td>181.99</td>
</tr>
<tr>
<td></td>
<td>181.08</td>
<td>180.90</td>
<td></td>
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</table>

% expatriates

<table>
<thead>
<tr>
<th></th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36.0</td>
<td>37.5</td>
<td>37.7</td>
</tr>
<tr>
<td></td>
<td>34.5</td>
<td>35.3</td>
<td>34.9</td>
</tr>
</tbody>
</table>

% club-trained

<table>
<thead>
<tr>
<th></th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23.1</td>
<td>26.5</td>
<td>24.7</td>
</tr>
<tr>
<td></td>
<td>26.7</td>
<td>23.3</td>
<td>22.2</td>
</tr>
</tbody>
</table>

Number of new players per club

<table>
<thead>
<tr>
<th></th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>9.3</td>
<td>10.0</td>
<td>11.1</td>
</tr>
<tr>
<td>European average</td>
<td>6.3</td>
<td>6.3</td>
<td>9.6</td>
</tr>
</tbody>
</table>
Spain: areas of recruitment

**Associations of recruitment**
1. Portugal............ 24
2. Italy ............... 21
3. England .......... 19
4. Argentina ....... 17
5. France .......... 16

**National origin of expatriates**
1. Argentina ......... 32
2. Brazil .......... 24
3. France .......... 23
4. Portugal ........ 22
5. Uruguay ....... 13

**Association of recruitment of players signed abroad**

**CONCACAF**

**CONMEBOL**

**Imports**

**Re-imports**

Number of players
Spain: the most and the least

<table>
<thead>
<tr>
<th>Average age</th>
<th>% club-trained</th>
<th>% expatriates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Levante UD</strong></td>
<td>29.13</td>
<td>62.5%</td>
</tr>
<tr>
<td><strong>2. CA Osasuna</strong></td>
<td>27.72</td>
<td>54.2%</td>
</tr>
<tr>
<td><strong>3. Rayo Vallecano</strong></td>
<td>27.66</td>
<td>44.0%</td>
</tr>
<tr>
<td><strong>4. Granada CF</strong></td>
<td>27.46</td>
<td>42.9%</td>
</tr>
<tr>
<td><strong>5. FC Barcelona</strong></td>
<td>27.43</td>
<td>37.5%</td>
</tr>
<tr>
<td><strong>10. Real Madrid CF</strong></td>
<td>25.71</td>
<td>14.3%</td>
</tr>
<tr>
<td><strong>17. Athletic Club Bilbao</strong></td>
<td>25.58</td>
<td>13.6%</td>
</tr>
<tr>
<td><strong>18. Real Sociedad de Fútbol</strong></td>
<td>25.42</td>
<td>13.6%</td>
</tr>
<tr>
<td><strong>19. Club Atlético de Madrid</strong></td>
<td>25.30</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>20. RCD Espanyol</strong></td>
<td>24.86</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average height (cm)</th>
<th>% active internationals</th>
<th>Number of new players</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Real Madrid CF</strong></td>
<td>183.38</td>
<td>81.0%</td>
</tr>
<tr>
<td><strong>2. Real Sociedad de Fútbol</strong></td>
<td>183.21</td>
<td>70.8%</td>
</tr>
<tr>
<td><strong>3. CA Osasuna</strong></td>
<td>182.84</td>
<td>39.1%</td>
</tr>
<tr>
<td><strong>4. Athletic Club Bilbao</strong></td>
<td>182.67</td>
<td>37.5%</td>
</tr>
<tr>
<td><strong>5. Granada CF</strong></td>
<td>181.92</td>
<td>31.8%</td>
</tr>
<tr>
<td><strong>16. Real Sporting de Gijón</strong></td>
<td>179.67</td>
<td>10.3%</td>
</tr>
<tr>
<td><strong>17. Rayo Vallecano</strong></td>
<td>179.36</td>
<td>8.0%</td>
</tr>
<tr>
<td><strong>18. Villarreal CF</strong></td>
<td>179.25</td>
<td>4.5%</td>
</tr>
<tr>
<td><strong>19. Real Betis Balompié</strong></td>
<td>177.79</td>
<td>4.3%</td>
</tr>
<tr>
<td><strong>20. FC Barcelona</strong></td>
<td>177.48</td>
<td>4.2%</td>
</tr>
</tbody>
</table>
Russia: demographic trends

- **Average age**
  - 2009: 25.95
  - 2010: 26.02
  - 2011/12: 26.34

- **Average height**
  - 2009: 182.49
  - 2010: 181.99
  - 2011/12: 182.21

- **% active nationals**
  - 2009: 13.0
  - 2010: 14.7
  - 2011/12: 14.4

- **Expatriates**
  - 2009: 44.6
  - 2010: 44.2
  - 2011/12: 46.8

- **% club-trained**
  - 2009: 23.1
  - 2010: 22.2
  - 2011/12: 21.2

- **Number of new signings per club**
  - Russia: 10.9
  - European average: 9.3
  - 2009: 10.0
  - 2010: 10.0
  - 2011/12: 11.1
Russia: areas of recruitment
Denmark: demographic trends

- **Average age**
  - 2009/10: 25.05, 25.58
  - 2010/11: 25.04, 25.20
  - 2011/12: 25.82, 25.22

- **% active internationals**
  - 2009/10: 13.6, 13.0
  - 2010/11: 14.7, 12.0
  - 2011/12: 14.4, 12.2

- **Average height**
  - 2009/10: 183.09, 181.85
  - 2010/11: 182.85, 181.99
  - 2011/12: 182.33, 181.99

- **% expatriates**
  - 2009/10: 34.5, 30.7
  - 2010/11: 35.3, 27.0
  - 2011/12: 34.9, 25.5

- **% club-trained**
  - 2009/10: 28.2, 23.1
  - 2010/11: 31.6, 23.3
  - 2011/12: 36.2, 22.2

- **Number of new players per club**
  - 2009/10: 9.3, 5.6
  - 2010/11: 10.0, 7.0
  - 2011/12: 11.1, 7.5
Denmark: areas of recruitment

Associations of recruitment
1. Norway .......... 12
2. Sweden .......... 11
3. Germany .......... 10
4. The Netherlands ... 9
5. England .......... 5

National origin of expatriates
1. Nigeria .......... 9
2. Sweden .......... 8
3. Iceland .......... 7
4. Norway .......... 7
5. Brazil .......... 5

Association of recruitment of players signed abroad
Imports’ Re-imports”

Number of players

CONCACAF
CONMEBOL
CAF
AFC/ OFC
Thank you for your attention, your questions and your feedbacks

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