

# **COMPETITIVE BALANCE: RESULTS OF TWO NATURAL EXPERIMENTS FROM RUGBY UNION.**

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# Effect of revenue sharing and salary caps on competitive balance.

- Results of two natural experiments from Rugby Union.
- Rugby Union went professional in 1995.
- English Premiership introduced revenue sharing and a binding salary cap in 1998/99 – to ensure viability of clubs.
- French Top 14 much less revenue sharing. Introduced (non-binding) salary cap in 2010/11 – following club collapse.
- French soccer league recognised as having more egalitarian distribution of revenue and higher degree of competitive balance than other major European soccer leagues. (Dobson and Goddard 2001; Noll, 2007; Pawlowski et. al., 2010; Vrooman, 2007).
- Inter-league competitive balance in European Rugby Cup (ERC) – evidence UEFA Champions' League led to significant decline in competitive balance within and between soccer leagues. (Noll, 2007; Szymanski, 2007; Vrooman, 2007; Pawlowski et. al., 2010; and Lee and Fort, 2012).

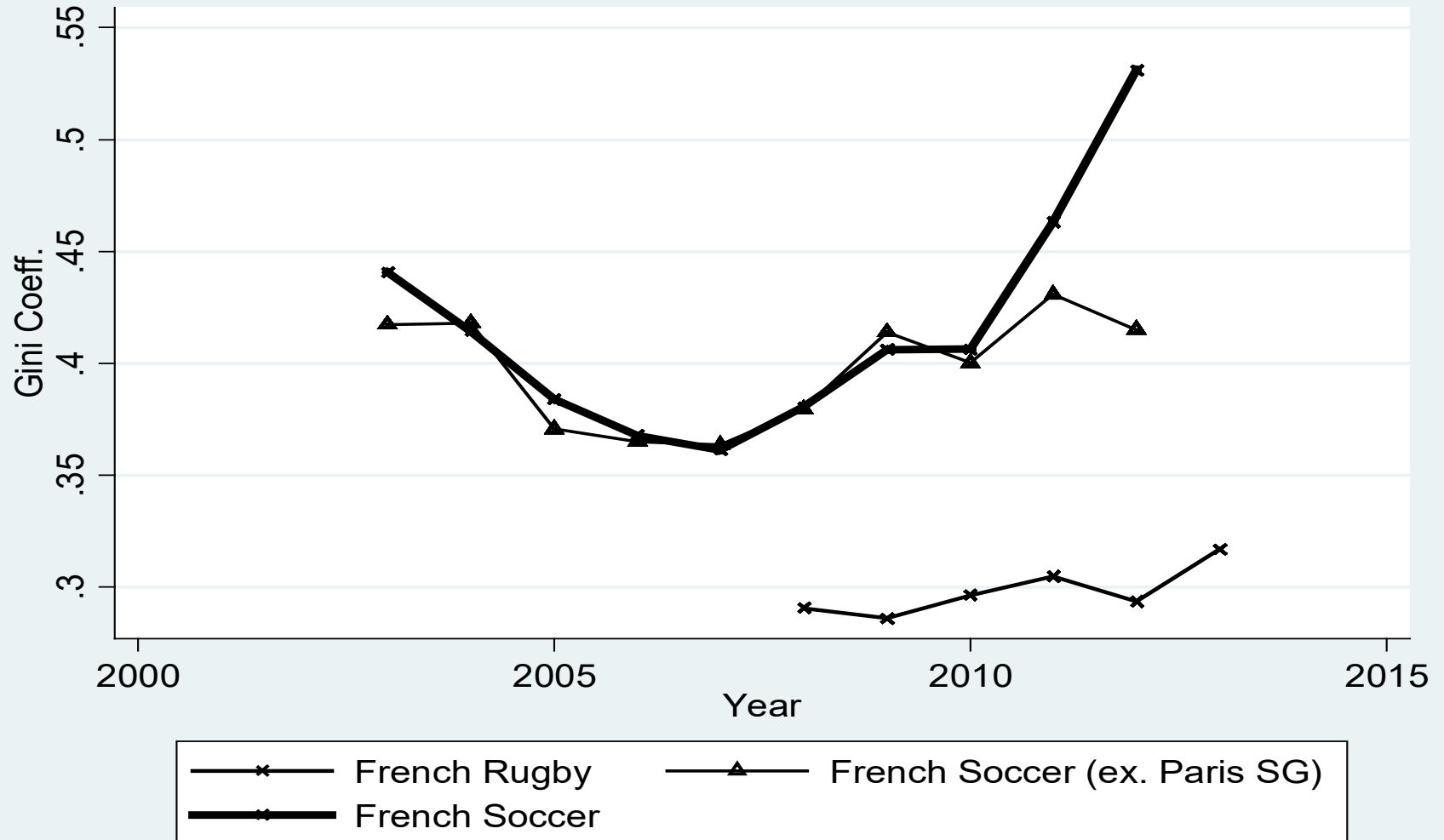
# Total Club Revenue in Major European Rugby and Soccer Leagues 2011/12.

League	Country	Sport	Total Revenue €M
FAPL	England	Soccer	2,360
Bundesliga	Germany	Soccer	1,900
La Liga	Spain	Soccer	1,800
Serie A	Italy	Soccer	1,600
Ligue 1	France	Soccer	1,349
Top 14	France	Rugby	257
Premiership (2010/11)	England	Rugby	140

## % Distribution of Revenue 2011/12

	Ligue 1 (Soccer)	Top 14 (Rugby)
Broadcast Rights	54.0	12.6
Sponsorship	16.2	43.8
Match Revenues	10.9	18.7
Other	18.9	25.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

# Gini Coefficient of Club Expenditure

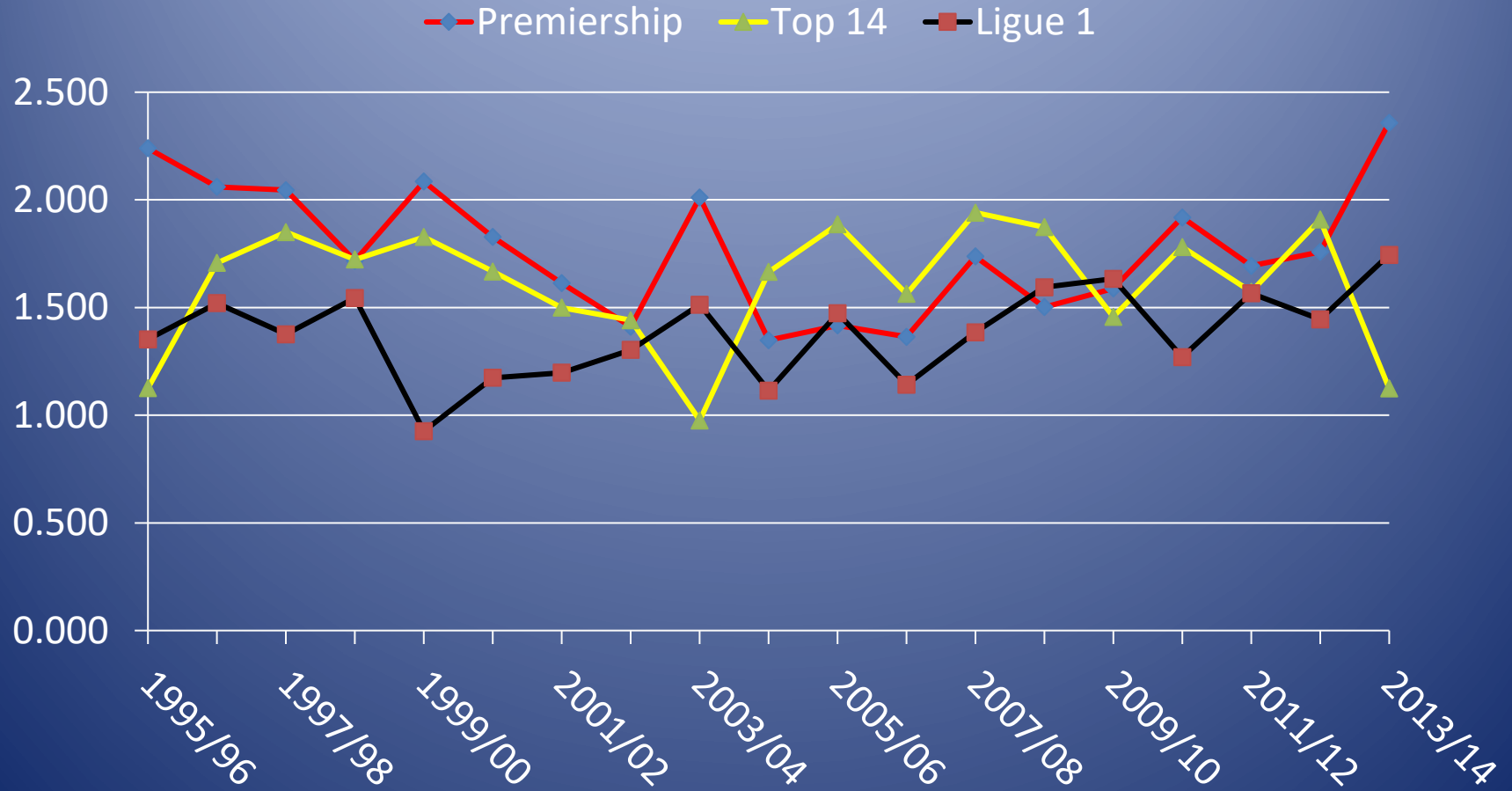


# Expenditure versus Position

	Ligue 1	Top 14
Variables	Position	Position
Expenditure (Log)	-10.78*** (0.331)	-11.49*** (0.415)
Constant	128.6*** (3.330)	121.0*** (3.822)
Observations	393	181
R <sup>2</sup>	0.730	0.810

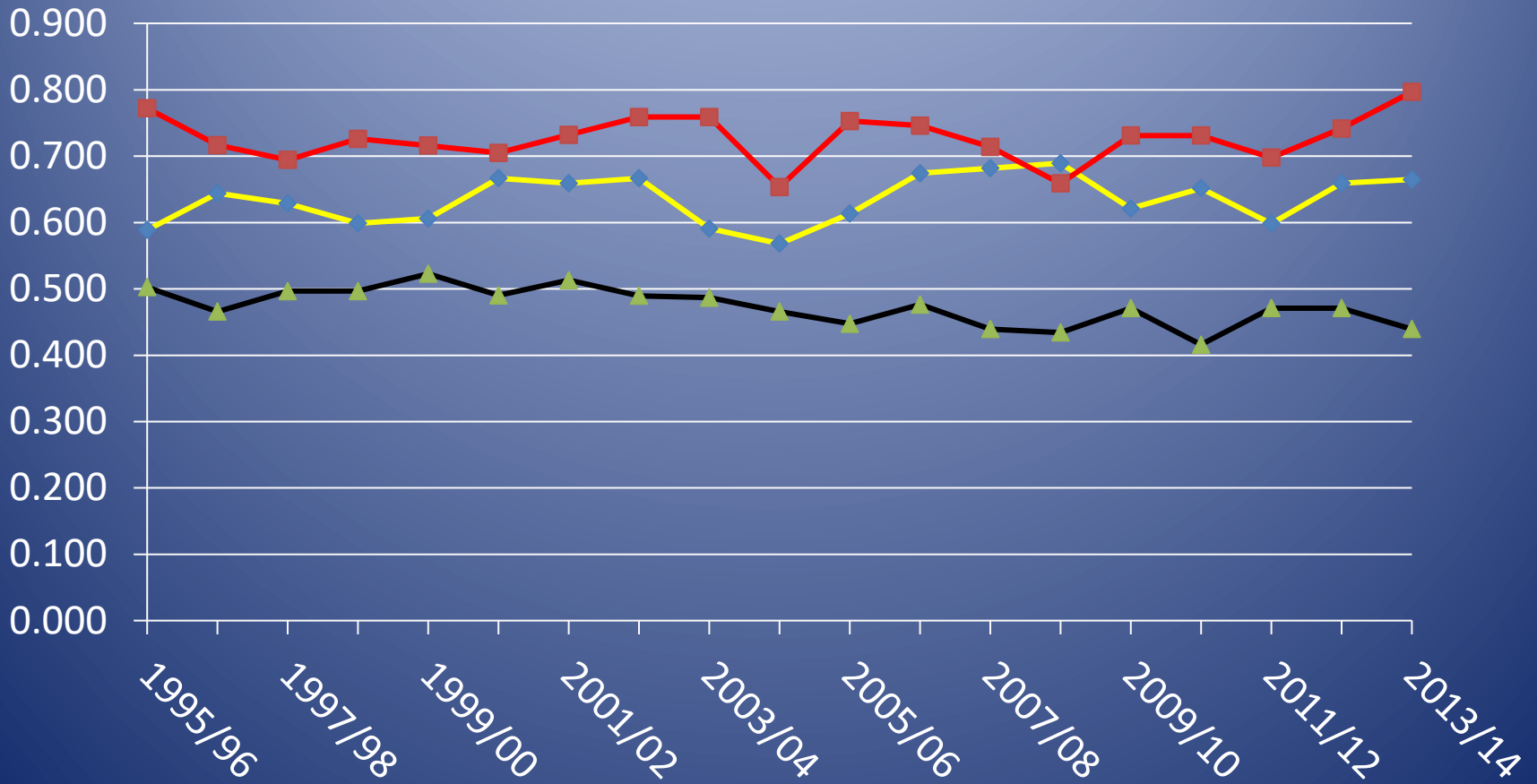
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# Adjusted Standard Deviation of Win Ratios



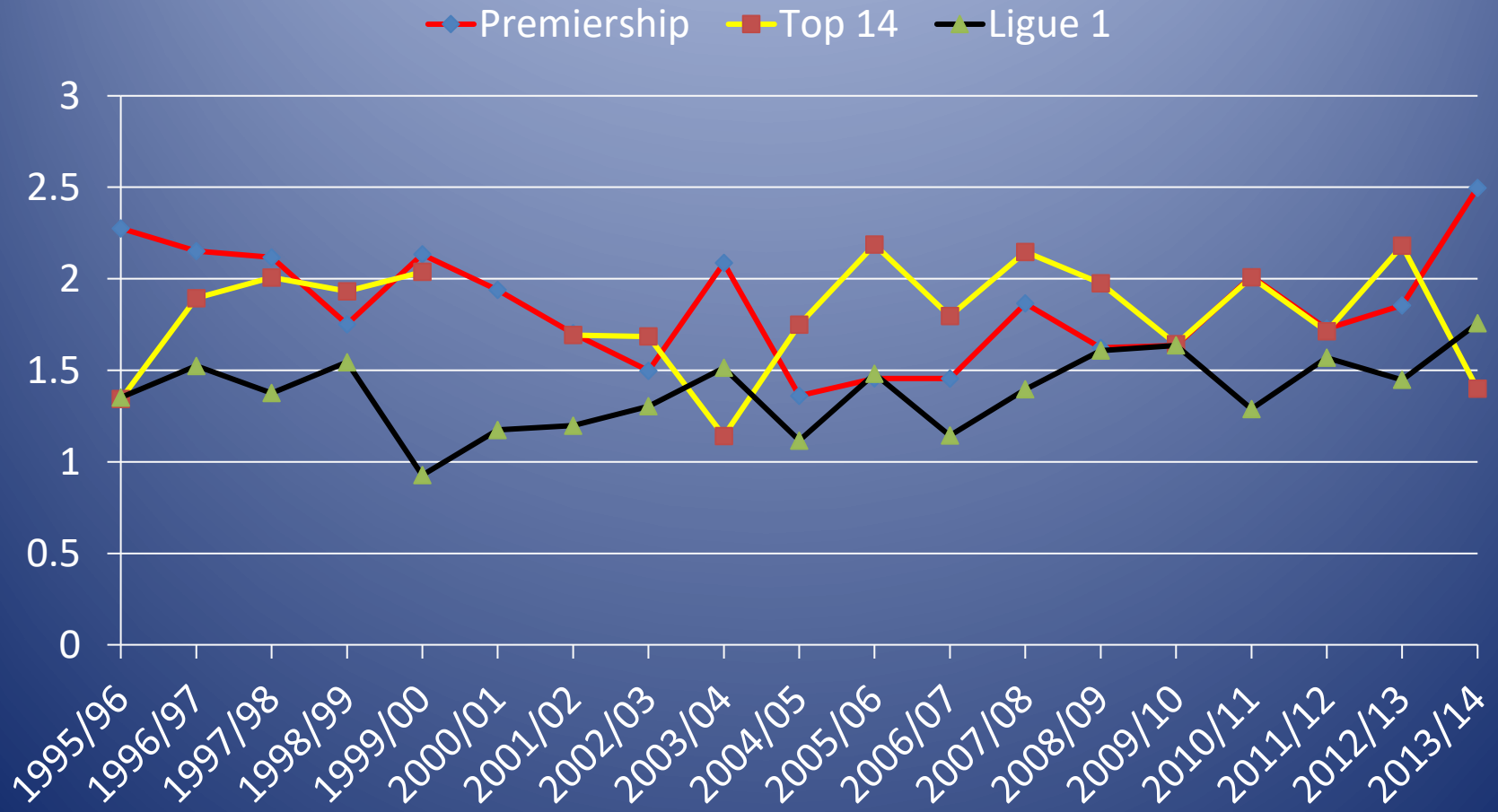
# Home Wins

◆ Premiership    ■ Top 14    ▲ Ligue 1



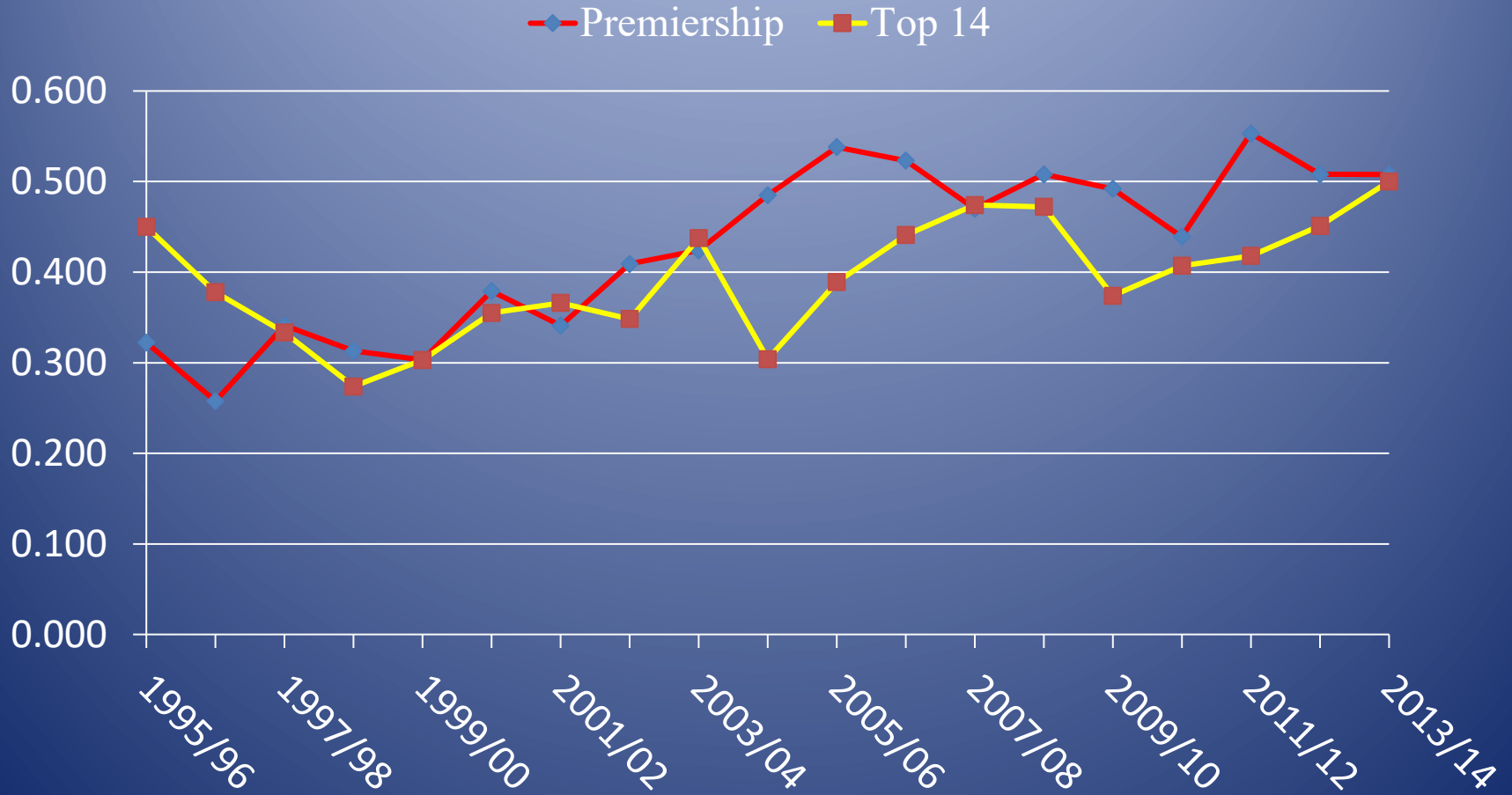


# ASD Adjusted for Home Bias



# Ratio of Close Matches

(Win Margin 7 points or less)



# Championship Winners in Various Leagues 1995/96-2012/13.

League	Sport	Country	Seasons	Winners	HHI
NFL	American Football	US	19	12	0.097
Ligue 1	Soccer	France	19	10	0.186
Premiership	Rugby	England	19	9	0.224
Top 14	Rugby	France	19	7	0.241
Celtic	Rugby	Multi-Country	13	5	0.254
Serie A	Soccer	Italy	18	5	0.284
La Liga	Soccer	Spain	19	5	0.302
Bundesliga	Soccer	Germany	19	6	0.391
FAPL	Soccer	England	19	4	0.396

# Budgets of Premiership and Top 14 ERC Participating Teams 2010/11

Team	Country	Budget €M
Toulouse	France	35.6
Clermont Auvergne	France	25.2
Racing Metro	France	23.5
Leicester	England	22.7
Toulon	France	22.3
Biarritz	France	18.6
Perpignan	France	16.7
Castres	France	15.9
Northampton	England	15.4
Bath	England	11.2
London Wasps	England	9.6*
London Irish	England	9.6
Saracens	England	8.9

# ERC Performances by League

	Champions	Quarter-Finals	% Wins in Pool Stages
Top 14	7	52 (48)	56.8
Premiership	6	41 (41)	56.5
Celtic League	6	51 (47)	47.4
Of which			
Ireland	6	30 (28)	62.6
Scotland	0	2 (2)	31.1
Wales	0	19 (17)	43.8
Italy	0	0 (0)	11.3

That's Full-Time Thank You

