Analysis of QM Rule adopted by the Council of the European Union

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Abstract

We analyse and assess the qualified majority (QM) decision rule for the Council of Ministers of the EU, adopted at the Council of the European Union, Brussels, 23 June 2007. This rule is essentially the same as that adopted at the Inter-Governmental Conference, Brussels, 18 June 2004. We compare this rule with the QM rule prescribed in the Treaty of Nice, and the scientifically-based rule known as the 'Jagelonian Compromise' .

Tables

Population of 27 EU members (2006 data)

Country	Population	Pop.%	Pop. sqrt.	Pop. sqrt.%
Germany	82,437,995	16.720	9,079.54	9.47
France	62,998,773	12.780	7,937.18	8.27
UK	60,393,100	12.250	7,771.30	8.10
Italy	58,751,711	11.920	7,664.97	7.99
Spain	43,758,250	8.877	6,615.00	6.90
Poland	38,157,055	7.740	6,177.14	6.44
Romania	21,610,213	4.384	4,648.68	4.85
Netherlands	16,334,210	3.313	4,041.56	4.21
Greece	11,125,179	2.257	3,335.44	3.48
Portugal	10,569,592	2.144	3,251.09	3.39
Belgium	10,511,382	2.132	3,242.13	3.38
Czech Rep	10,251,079	2.079	3,201.73	3.34
Hungary	10,076,581	2.044	3,174.36	3.31
Sweden	9,047,752	1.835	3,007.95	3.14
Austria	8,265,925	1.677	2,875.05	3.00
Bulgaria	7,718,750	1.566	2,778.26	2.90
Denmark	5,427,459	1.101	2,329.69	2.43
Slovakia	5,389,180	1.093	2,321.46	2.42
Finland	5,255,580	1.066	2,292.51	2.39
Ireland	4,209,019	0.854	2,051.59	2.14
Lithuania	3,403,284	0.690	1,844.80	1.92
Latvia	2,294,590	0.465	1,514.79	1.58
Slovenia	2,003,358	0.406	1,415.40	1.48
Estonia	1,344,684	0.273	1,159.61	1.21
Cyprus	766,414	0.155	875.45	0.91
Luxembourg	459,500	0.093	677.86	0.71
Malta	404,346	0.082	635.88	0.66
Total	492,964,961	99.996	95,920.42	100.02

QM rule C_{27}

Country	ψ	100β	γ	Quotient
Germany	0.200104	11.6487	0.77825	1.231
France	0.155154	9.0320	0.60343	1.092
UK	0.149271	8.6896	0.58055	1.073
Italy	0.145772	8.4859	0.56694	1.062
Spain	0.112475	6.5476	0.43744	0.949
Poland	0.098062	5.7085	0.38139	0.886
Romania	0.071336	4.1527	0.27744	0.857
Netherlands	0.060063	3.4965	0.23360	0.830
Greece	0.049392	2.8753	0.19210	0.827
Portugal	0.048174	2.8043	0.18736	0.827
Belgium	0.048073	2.7985	0.18697	0.828
Czech Rep	0.047561	2.7687	0.18498	0.829
Hungary	0.047157	2.7452	0.18340	0.830
Sweden	0.045127	2.6270	0.17551	0.838
Austria	0.043499	2.5322	0.16918	0.845
Bulgaria	0.042384	2.4673	0.16484	0.852
Denmark	0.037605	2.1891	0.14626	0.901
Slovakia	0.037505	2.1833	0.14586	0.902
Finland	0.037302	2.1715	0.14508	0.909
Ireland	0.035066	2.0413	0.13638	0.954
Lithuania	0.033426	1.9458	0.13000	1.012
Latvia	0.031174	1.8148	0.12124	1.149
Slovenia	0.030558	1.7789	0.11885	1.206
Estonia	0.029113	1.6958	0.11330	1.403
Cyprus	0.027997	1.6298	0.10889	1.786
Luxembourg	0.027275	1.5878	0.10608	2.247
Malta	0.027174	1.5819	0.10568	2.386
Total	1.717799	100.0000		

$$\omega = 17,255,117$$

QM rule N_{27}

Country	ψ	100β	γ	Quotient
Germany	0.03269	7.7835	0.80687	0.822
France	0.03269	7.7835	0.80686	0.941
UK	0.03269	7.7835	0.80686	0.961
Italy	0.03269	7.7835	0.80686	0.974
Spain	0.03116	7.4192	0.76924	1.075
Poland	0.03116	7.4192	0.76923	1.152
Romania	0.01789	4.2596	0.44155	0.878
Netherlands	0.01669	3.9739	0.41199	0.944
Greece	0.01547	3.6834	0.38196	1.058
Portugal	0.01547	3.6834	0.38196	1.087
Belgium	0.01547	3.6834	0.38196	1.090
Czech Rep	0.01547	3.6834	0.38196	1.103
Hungary	0.01547	3.6834	0.38196	1.113
Sweden	0.01299	3.0929	0.32060	0.985
Austria	0.01299	3.0929	0.32060	1.031
Bulgaria	0.01299	3.0929	0.32060	1.067
Denmark	0.00916	2.1810	0.22609	0.898
Slovakia	0.00916	2.1810	0.22609	0.901
Finland	0.00916	2.1810	0.22609	0.913
Ireland	0.00916	2.1810	0.22609	1.019
Lithuania	0.00916	2.1810	0.22609	1.136
Latvia	0.00525	1.2500	0.12960	0.791
Slovenia	0.00525	1.2500	0.12960	0.845
Estonia	0.00525	1.2500	0.12960	1.033
Cyprus	0.00525	1.2500	0.12960	1.374
Luxembourg	0.00525	1.2500	0.12960	1.761
Malta	0.00396	0.9429	0.09768	1.429
Total	0.41999	99.9995		

$$\omega = 2,718,741$$

QM rule J_{27}

Country	w	ψ	100β	γ	Quotient
Germany	947	0.201020	9.4491	0.616977	0.998
France	827	0.176002	8.2731	0.540191	1.000
UK	810	0.172416	8.1045	0.529186	1.001
Italy	799	0.170085	7.9949	0.522030	1.001
Spain	690	0.146932	6.9066	0.450968	1.001
Poland	644	0.137124	6.4456	0.420867	1.001
Romania	485	0.103214	4.8516	0.316788	1.000
Netherlands	421	0.089566	4.2101	0.274900	1.000
Greece	348	0.074016	3.4792	0.227172	1.000
Portugal	339	0.072096	3.3889	0.221279	1.000
Belgium	338	0.071882	3.3789	0.220624	1.000
Czech Rep	334	0.071030	3.3388	0.218007	1.000
Hungary	331	0.070384	3.3084	0.216024	1.000
Sweden	314	0.066773	3.1387	0.204942	1.000
Austria	300	0.063787	2.9983	0.195777	0.999
Bulgaria	290	0.061660	2.8984	0.189249	0.999
Denmark	243	0.051662	2.4284	0.158564	0.999
Slovakia	242	0.051449	2.4184	0.157909	0.999
Finland	239	0.050807	2.3882	0.155937	0.999
Ireland	214	0.045486	2.1381	0.139609	0.999
Lithuania	192	0.040815	1.9185	0.125271	0.999
Latvia	158	0.033582	1.5785	0.103070	0.999
Slovenia	148	0.031451	1.4784	0.096530	0.999
Estonia	121	0.025711	1.2086	0.078914	0.999
Cyprus	91	0.019339	0.9090	0.059356	0.999
Luxembourg	71	0.015089	0.7093	0.046313	0.999
Malta	66	0.014026	0.6593	0.043050	0.999
Total	10,002	2.127404	99.9998		

$$\omega = 21,864,982$$

QM rule N_{27} compared to J_{27}

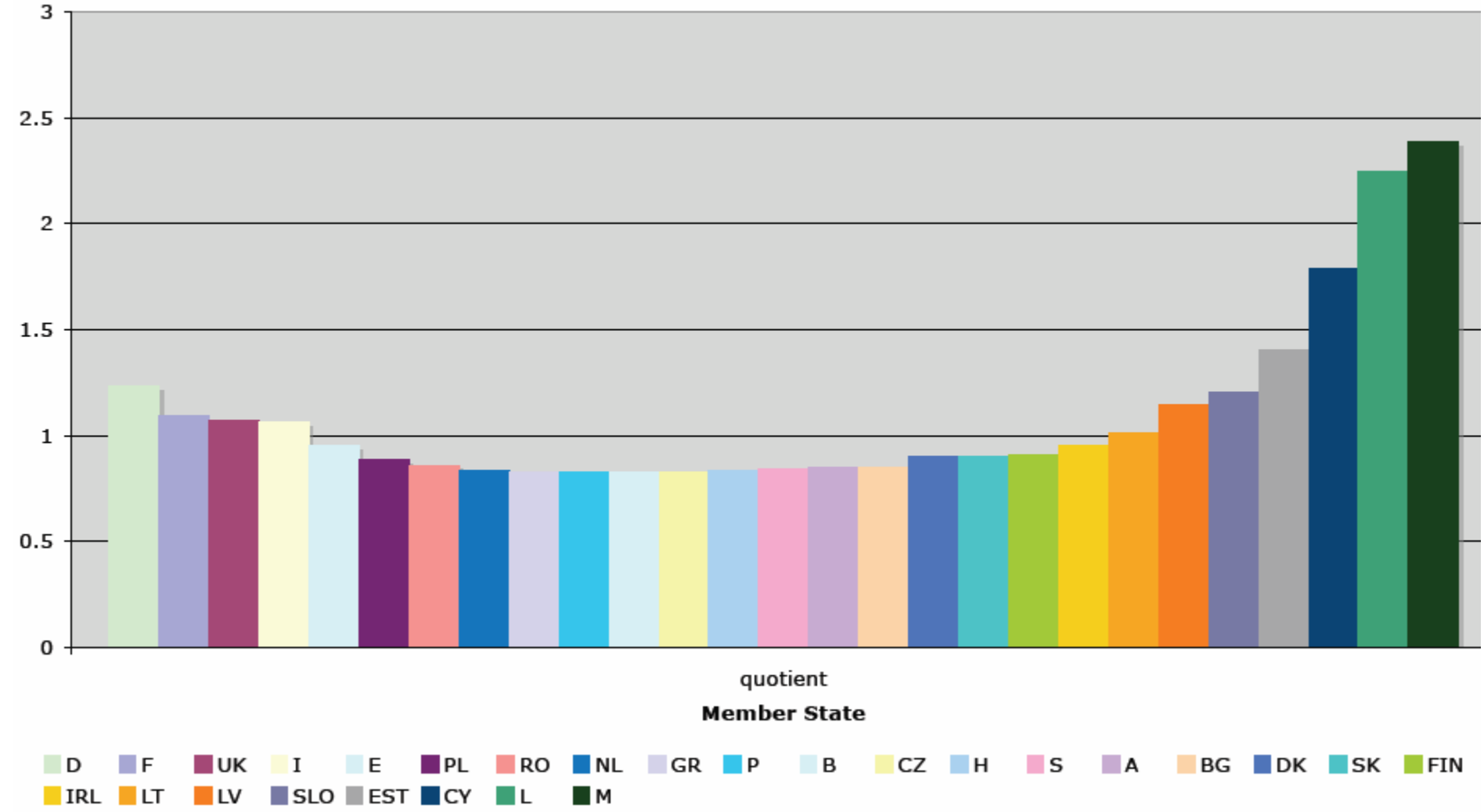
Country	$\psi[\mathcal{C}_{27}]/\psi[\mathcal{J}_{27}]$	$\beta[\mathcal{C}_{27}]/\beta[\mathcal{J}_{27}]$	$\gamma[\mathcal{C}_{27}]/\gamma[\mathcal{J}_{27}]$
Germany	0.995443	1.2328	1.26139
France	0.881547	1.0917	1.11707
UK	0.865761	1.0722	1.09706
Italy	0.857054	1.0614	1.08603
Spain	0.765490	0.9480	0.97000
Poland	0.715134	0.8856	0.90620
Romania	0.691147	0.8559	0.87579
Netherlands	0.670600	0.8305	0.84976
Greece	0.667315	0.8264	0.84561
Portugal	0.668192	0.8275	0.84671
Belgium	0.668777	0.8282	0.84746
Czech Rep	0.669590	0.8292	0.84850
Hungary	0.669996	0.8298	0.84898
Sweden	0.675827	0.8370	0.85639
Austria	0.681941	0.8445	0.86415
Bulgaria	0.687382	0.8513	0.87102
Denmark	0.727904	0.9015	0.92240
Slovakia	0.728974	0.9028	0.92370
Finland	0.734190	0.9093	0.93038
Ireland	0.764631	0.9547	0.97687
Lithuania	0.818964	1.0142	1.03775
Latvia	0.928295	1.1497	1.17629
Slovenia	0.971607	1.2033	1.23122
Estonia	1.132317	1.4032	1.43574
Cyprus	1.447696	1.7929	1.83452
Luxembourg	1.807608	2.2386	2.29050
Malta	1.937402	2.3994	2.45482

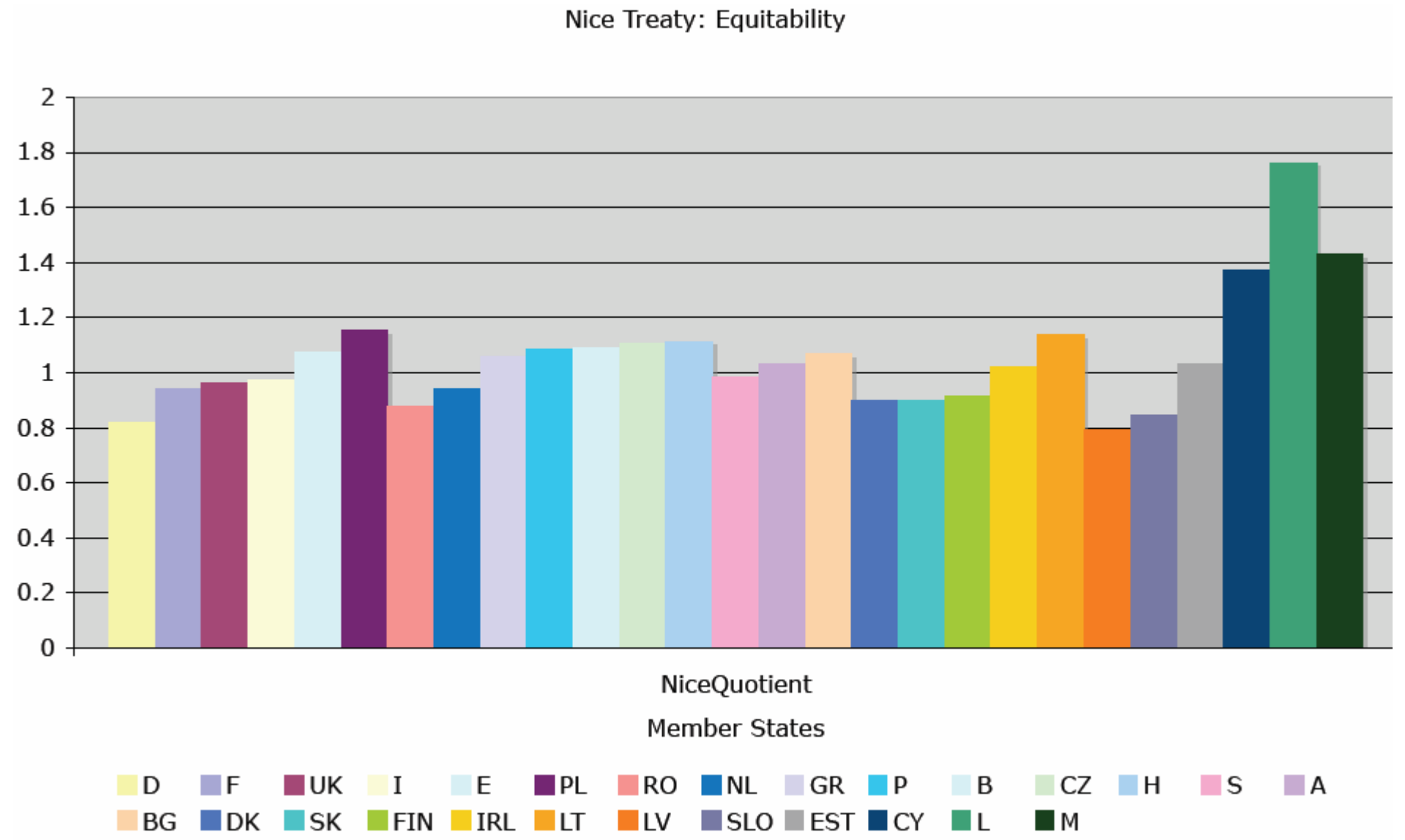
Synoptic comparison

Rule	D	$\max\|d\|$	$\mathrm{ran}(d)$	MMD	S	A	R	Odds
$\mathcal{C}_{27}$	7.6010	138.6	155.9	5273	0.945	0.129	0.743	27:4
$\mathcal{N}_{27}$	4.8164	76.1	93.9	8018	0.858	0.020	0.959	49:1
$\mathcal{J}_{27}$	0.0365	0.2	0.3	4496	0.958	0.163	0.674	31:6

D, $\max|d|$ and $\mathrm{ran}(d)$ are given in percentages.

Lisbon Treaty: Equitability




Nice Treaty: Equitability
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NiceQuotient
Member States
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PL
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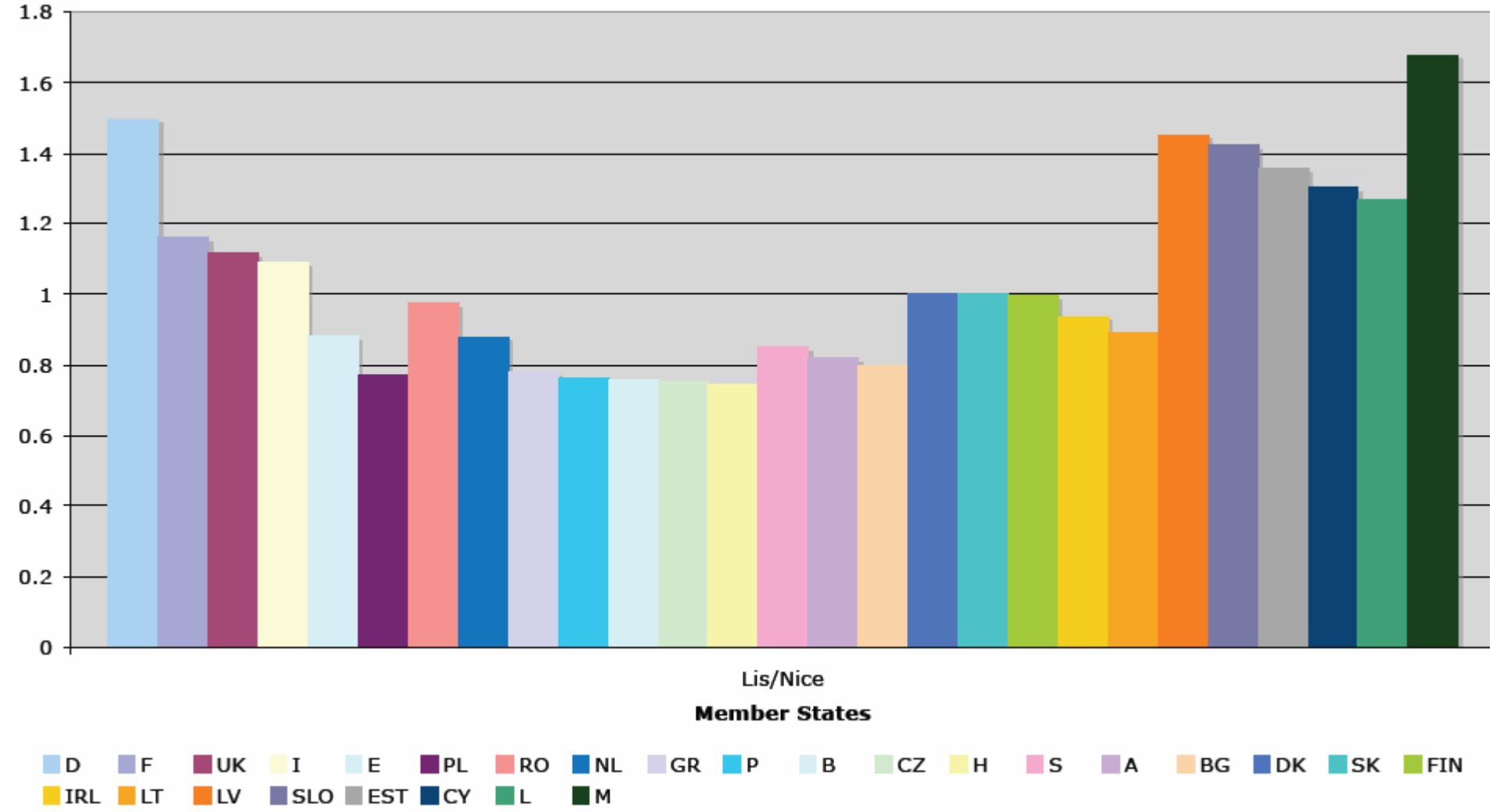
Lisbon/Nice


1.8
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Lis/Nice
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Thank you

for your attention