

## Web Appendix for “Rules of Thumb for Sovereign Debt crises” by P. Manasse and N. Roubini.

### Within Node Summary statistics.

The Data refer to the Classification Tree described in the paper “Rules of Thumb for Sovereign Debt crises” by Manasse and Roubini, Journal of International Economics, 2008

#### Variables Legenda:

ltedy = lag total external debt over gdp

lcstdr = lag short term external debt over reserve

lpedrev = lag public external debt over revenue

lrgrowth = lag real gdp growth rate

lover = lag exchange rate overvaluation

linf = lag consumer price inflation rate

ynpre = years to the next presidential election

exr\_vc4 = 4 year moving average for the coefficient of variation of the exchange rate with the USD

lust = lag US treasury bill rate

-> node = 1

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	11	23.33946	10.02867	6.488286	43.86834
lcstdr	9	.5122203	.2814667	.1633986	1.059952
lpedrev	10	.6161116	.4269162	.0667816	1.456564
lrgrowth	13	-10.13876	4.335348	-19.00766	-5.752042
lover	13	-7.230769	34.87395	-66	31
linf	13	68.33571	109.4996	4.381442	376.3528
ynpre	7	6.428571	7.634508	0	18
exr_vc4	8	18.4966	45.03679	0	128.7015
lust	13	6.383077	1.533364	4.66	9.39
lfirer	9	1.028764	1.524624	-.2346517	4.709695

-> node = 2

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	4	32.87865	10.60689	23.37033	48.07395
lcstdr	4	.9214957	.1001032	.8348705	1.052006
lpedrev	0				
lrgrowth	4	-7.982597	1.727004	-9.5	-5.50626
lover	4	82.75	17.2506	65	99
linf	4	14.32866	5.674588	6.241711	18.99302
ynpre	4	2.5	1.290994	1	4
exr_vc4	4	.000248	.0004946	0	.00099
lust	4	11.2625	2.260713	8.62	14.08
lfirer	4	.7060098	.4577591	.0450747	1.081652

-> node = 3

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	421	27.04136	11.25034	2.032296	49.58341
lcstdr	406	.5798429	.3537103	6.15e-06	1.338717
lpedrev	305	.9253409	.5118229	.0604249	2.128971
lrgrowth	560	5.452812	4.181915	-5.397828	28.58982
lover	542	17.86297	170.5172	-2141	1569
linf	559	23.8839	123.6825	-9.750117	2075.827
ynpre	296	6.824324	7.144244	0	26
exr_vc4	468	44.59529	436.7397	0	6018.774
lust	560	6.380125	2.512021	3.02	14.08
lfirer	386	.8172053	.9991256	-1.34547	7.054746

-> node = 4

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	13	38.8293	10.40315	20.34521	47.81421
lcstdr	9	.5694711	.3477909	.1151478	1.179842
lpedrev	10	2.562767	.318339	2.260435	3.268526
lrgwt	13	4.824542	3.675539	-5.40003	10.69583
lover	13	73.46154	150.5587	-40	535
linf	13	4.579852	6.763478	-14.73562	10.13064
ynpre	7	3	4.966555	0	14
exr_vc4	10	.7782123	1.919929	0	6.066359
lust	13	5.943077	2.143227	3.02	11.62
lfirer	10	1.259597	1.258394	-.6571133	3.344804

-> node = 5

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	19	42.4157	5.280372	27.59505	49.42123
lcstdr	13	.7055519	.392326	.2309441	1.328677
lpedrev	18	2.818908	.4335729	2.156907	3.505846
lrgwt	20	4.037621	2.739771	-.5999628	9.2
lover	20	40.75	69.9781	-140	169
linf	20	23.38353	11.59667	11.20001	62.83162
ynpre	18	2	1.371989	0	4
exr_vc4	20	21.07354	50.6398	0	216.6144
lust	20	6.604	1.758401	3.46	10.04
lfirer	19	1.19378	1.329116	-.1145479	5.700797

-> node = 6

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	23	16.45389	2.103136	11.34978	18.74972
lcstdr	20	3.114638	1.510744	1.489639	7.642307
lpedrev	17	.3931836	.1349383	.1951414	.6430156
lrgwt	23	5.354797	2.908931	0	9.227254
lover	19	51.36842	50.07795	-40	102
linf	23	17.5745	21.93036	4.480794	100.7661
ynpre	14	1.642857	1.549548	0	5
exr_vc4	14	.3662416	.6718886	1.12e-13	2.076844
lust	23	5.537826	1.670152	4.07	11.62
lfirer	23	2.205926	1.026833	.817609	5.276544

-> node = 7

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	122	37.18657	8.389567	19.39202	49.55947
lcstdr	117	2.892809	1.442559	1.343418	7.041553
lpedrev	110	1.225333	.5984648	.1347887	2.758237
lrgwt	130	3.571343	3.777738	-5.743759	10.98538
lover	113	31.48499	56.11402	-142	242
linf	130	100.1561	366.5042	.1556426	2947.733
ynpre	72	2.055556	1.582376	0	5
exr_vc4	125	.6011585	1.831719	0	11.70426
lust	130	6.394692	2.474164	3.02	14.08
lfirer	119	2.34733	1.846809	-.6988908	10.70896

-> node 8

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	22	39.47443	6.055971	30.54562	49.69629
lcstdr	19	2.260047	.5949541	1.452587	3.312606
lpedrev	17	1.304373	.4611042	.1565383	1.952837
lgrwt	22	4.124183	3.698603	-4.970196	9.578137
lover	22	65.54545	49.10894	-27	100
linf	22	51.45372	30.40208	6.100001	106.2453
ynpre	1	1	.	1	1
exr_vc4	20	11695.61	25379.88	44.05882	99721.51
lust	22	6.014545	1.919421	3.02	10.73
lfirer	22	1.470222	.6626483	.7686937	3.14722

-> node = 9

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	51	35.57394	7.939769	14.26834	49.59968
lcstdr	39	2.753097	3.935651	1.377605	26.23398
lpedrev	25	1.029494	.3016028	.4517194	1.499283
lgrwt	51	5.83745	3.812777	-5.565019	14.30232
lover	40	33.025	70.02948	-165	234
linf	51	35.14107	84.28305	-.5	483.7164
ynpre	33	11.72727	4.185337	6	21
exr_vc4	35	6.927946	16.21907	0	68.33156
lust	51	6.176275	1.604871	4.07	9.39
lfirer	47	2.947221	2.232868	.2840717	14.66849

-> node = 10

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	10	39.20741	10.84651	18.65187	48.22111
lcstdr	7	2.148877	.5878228	1.427149	2.984298
lpedrev	3	1.197263	.0942309	1.09112	1.271064
lgrwt	10	3.670633	4.517835	-4.399844	9.190334
lover	7	50.14286	55.33362	-11	121
linf	10	48.0778	40.63734	8.999987	132.619
ynpre	8	9.375	2.263846	6	12
exr_vc4	10	8.047537	14.17547	0	41.11569
lust	10	11.568	1.844203	10.04	14.08
lfirer	10	3.248592	1.212903	1.541937	5.25821

-> node = 11

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	86	67.28138	15.65349	49.83395	119.8102
lcstdr	73	1.138885	.8127716	.1099004	4.362736
lpedrev	73	2.038503	.6920602	.1058804	3.058276
lgrwt	98	3.371922	3.660782	-10.50997	12.21689
lover	95	1.652632	29.4249	-38	111
linf	96	4.910714	2.852766	-1.087978	10.20237
ynpre	23	2.608696	1.924463	0	6
exr_vc4	96	21.70037	197.2166	0	1932.07
lust	98	5.401735	1.795945	3.02	14.08
lfirer	84	.6166636	.4760599	-.3322813	1.435551

-> node = 9

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	9	109.6436	48.79899	57.76272	203.3751
lcstdr	6	1.51831	1.010072	.3417825	3.351758
lpedrev	9	3.573123	.4581169	3.112929	4.606966
lrgrrwt	10	6.92026	4.844103	.406476	16.07354
lover	10	-79.3	240.6704	-754	96
linf	10	4.634049	3.631668	-3.343181	9.270972
ynpre	1	3	.	3	3
exr_vc4	9	11.3209	29.32364	.0001881	88.81163
lust	10	5.176	1.72567	3.02	7.51
lfirer	7	.8637729	.4522727	.3086539	1.376656

-> node = 13

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	76	75.94606	27.64313	49.96318	227.7119
lcstdr	67	3.260058	3.024957	.3020917	15.29413
lpedrev	70	2.429571	1.053316	.4884881	4.958096
lrgrrwt	79	3.58202	4.400485	-13.4219	9.792643
lover	55	17.8	38.58823	-42	100
linf	79	5.228633	3.258125	-1.166685	10.42469
ynpre	42	3.404762	2.776728	0	9
exr_vc4	76	3.338815	10.65144	0	70.62724
lust	79	6.683418	2.671978	3.02	14.08
lfirer	63	3.339998	2.737023	1.43975	16.59868

-> node = 14

Variable	Obs	Mean	Std. Dev.	Min	Max
ltedy	184	77.2895	26.43122	49.70036	185.5119
lcstdr	159	2.715214	2.539987	.2029891	19.57878
lpedrev	160	3.224896	2.21617	.7356849	18.61765
lrgrrwt	196	1.910397	4.966801	-13.44814	12.82164
lover	188	33.45745	56.16651	-289	162
linf	196	186.3929	1042.093	10.52781	11749.63
ynpre	134	2.544776	2.990249	0	17
exr_vc4	193	4021.855	34417.18	0	424350.9
lust	196	7.063469	2.39213	3.02	14.08
lfirer	183	2.131839	2.535247	-1.075903	20.19489