

Appendix A. Standard Distributions

A.1. Cumulative Normal Distribution

The following figure and table show the cumulative standard normal distribution in function of z , i.e. $P[x \leq z]$ in function of z , where $x = N(0,1)$. The values can also be computed with the NORMSDIST function in the Excel spreadsheet.

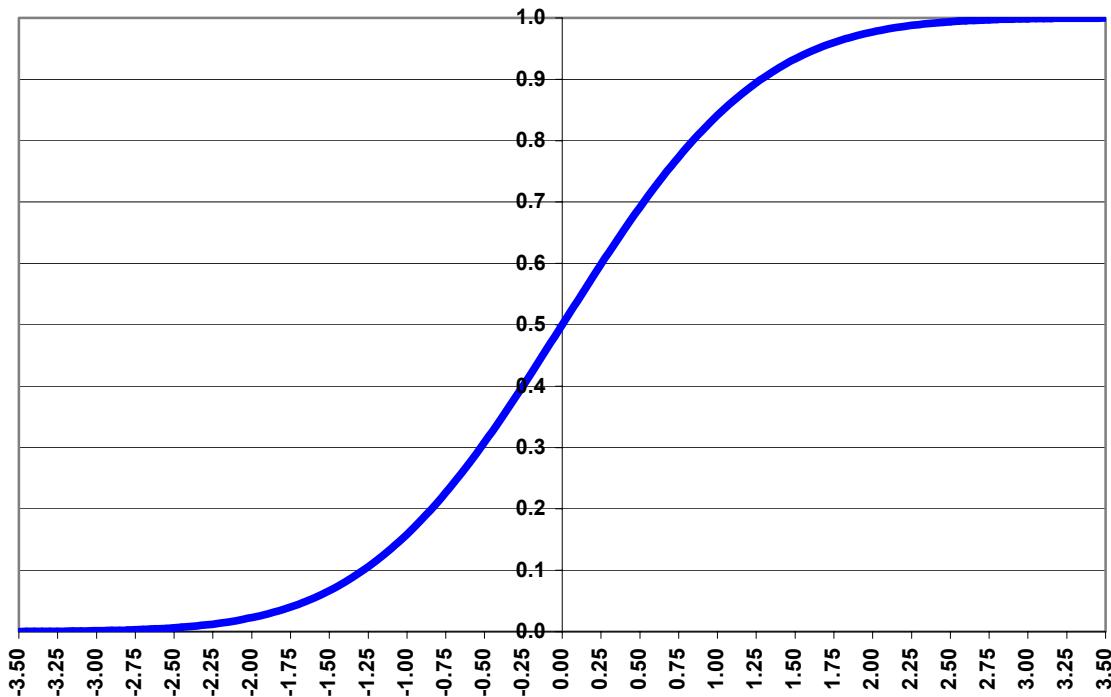


Figure A.1. Cumulative Standard Normal Distribution

Table A.1. Cumulative Standard Normal Distribution

z	$F(z)$	z	$F(z)$	z	$F(z)$	z	$F(z)$	z	$F(z)$
-3.50	0.000233	-2.10	0.017864	-0.70	0.241964	0.75	0.773373	2.15	0.984222
-3.45	0.000280	-2.05	0.020182	-0.65	0.257846	0.80	0.788145	2.20	0.986097
-3.40	0.000337	-2.00	0.022750	-0.60	0.274253	0.85	0.802338	2.25	0.987776
-3.35	0.000404	-1.95	0.025588	-0.55	0.291160	0.90	0.815940	2.30	0.989276
-3.30	0.000483	-1.90	0.028716	-0.50	0.308538	0.95	0.828944	2.35	0.990613
-3.25	0.000577	-1.85	0.032157	-0.45	0.326355	1.00	0.841345	2.40	0.991802
-3.20	0.000687	-1.80	0.035930	-0.40	0.344578	1.05	0.853141	2.45	0.992857
-3.15	0.000816	-1.75	0.040059	-0.35	0.363169	1.10	0.864334	2.50	0.993790
-3.10	0.000968	-1.70	0.044565	-0.30	0.382089	1.15	0.874928	2.55	0.994614
-3.05	0.001144	-1.65	0.049471	-0.25	0.401294	1.20	0.884930	2.60	0.995339
-3.00	0.001350	-1.60	0.054799	-0.20	0.420740	1.25	0.894350	2.65	0.995975
-2.95	0.001589	-1.55	0.060571	-0.15	0.440382	1.30	0.903199	2.70	0.996533
-2.90	0.001866	-1.50	0.066807	-0.10	0.460172	1.35	0.911492	2.75	0.997020
-2.85	0.002186	-1.45	0.073529	-0.05	0.480061	1.40	0.919243	2.80	0.997445
-2.80	0.002555	-1.40	0.080757	0.00	0.500000	1.45	0.926471	2.85	0.997814
-2.75	0.002980	-1.35	0.088508	0.05	0.519939	1.50	0.933193	2.90	0.998134
-2.70	0.003467	-1.30	0.096801	0.10	0.539828	1.55	0.939429	2.95	0.998411
-2.65	0.004025	-1.25	0.105650	0.15	0.559618	1.60	0.945201	3.00	0.998650
-2.60	0.004661	-1.20	0.115070	0.20	0.579260	1.65	0.950529	3.05	0.998856
-2.55	0.005386	-1.15	0.125072	0.25	0.598706	1.70	0.955435	3.10	0.999032
-2.50	0.006210	-1.10	0.135666	0.30	0.617911	1.75	0.959941	3.15	0.999184
-2.45	0.007143	-1.05	0.146859	0.35	0.636831	1.80	0.964070	3.20	0.999313
-2.40	0.008198	-1.00	0.158655	0.40	0.655422	1.85	0.967843	3.25	0.999423
-2.35	0.009387	-0.95	0.171056	0.45	0.673645	1.90	0.971284	3.30	0.999517
-2.30	0.010724	-0.90	0.184060	0.50	0.691462	1.95	0.974412	3.35	0.999596
-2.25	0.012224	-0.85	0.197662	0.55	0.708840	2.00	0.977250	3.40	0.999663
-2.20	0.013903	-0.80	0.211855	0.60	0.725747	2.05	0.979818	3.45	0.999720
-2.15	0.015778	-0.75	0.226627	0.65	0.742154	2.10	0.982136	3.50	0.999767
				0.70	0.758036				

A.2. Unit Loss Function

The following figure and table show the unit loss distribution in function of z . The unit loss function is defined as $L(z) = \int_z^{\infty} (t - z)\phi(t)dt$, where $\phi(t)$ is the standard normal density function.

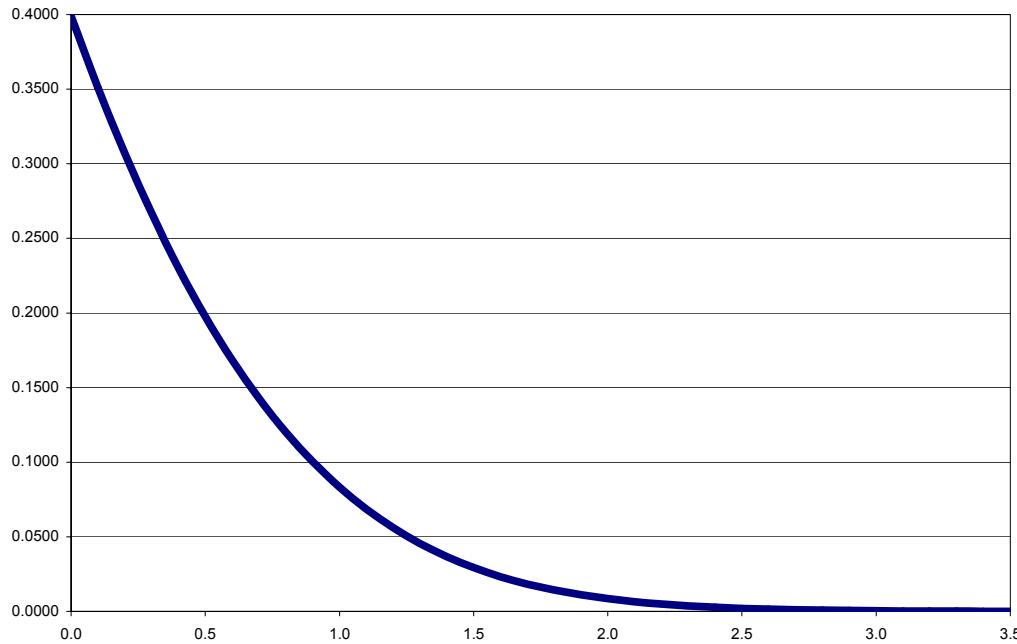


Figure A.2. Unit Loss Function

Table A.2. Unit Loss Function

z	$L(z)$								
0.00	0.3989								
0.05	0.3744	0.75	0.1312	1.45	0.0328	2.15	0.0056	2.85	0.0006
0.10	0.3509	0.80	0.1202	1.50	0.0293	2.20	0.0049	2.90	0.0005
0.15	0.3284	0.85	0.1100	1.55	0.0261	2.25	0.0042	2.95	0.0005
0.20	0.3069	0.90	0.1004	1.60	0.0232	2.30	0.0037	3.00	0.0004
0.25	0.2863	0.95	0.0916	1.65	0.0206	2.35	0.0032	3.05	0.0003
0.30	0.2668	1.00	0.0833	1.70	0.0183	2.40	0.0027	3.10	0.0003
0.35	0.2481	1.05	0.0757	1.75	0.0162	2.45	0.0023	3.15	0.0002
0.40	0.2304	1.10	0.0686	1.80	0.0143	2.50	0.0020	3.20	0.0002
0.45	0.2137	1.15	0.0621	1.85	0.0126	2.55	0.0017	3.25	0.0002
0.50	0.1978	1.20	0.0561	1.90	0.0111	2.60	0.0015	3.30	0.0001
0.55	0.1828	1.25	0.0506	1.95	0.0097	2.65	0.0012	3.35	0.0001
0.60	0.1687	1.30	0.0455	2.00	0.0085	2.70	0.0011	3.40	0.0001
0.65	0.1554	1.35	0.0409	2.05	0.0074	2.75	0.0009	3.45	0.0001
0.70	0.1429	1.40	0.0367	2.10	0.0065	2.80	0.0008	3.50	0.0001