

**Lampiran 1. Luas Panen, Produksi, dan Produktivitas Kedelai Menurut Kabupaten/Kota di Sumatera Utara Tahun 2011**

No	Kabupaten/Kota	Luas Panen (Ha)	Produksi (Ton)	Rata-Rata Produksi (kw/ha)
Kabupaten				
1	Nias	1	1	7,99
2	Mandailing Natal	399	393	9,54
3	Tapanuli Selatan	592	507	8,57
4	Tapanuli Tengah	59	73	12,34
5	Tapanuli Utara	-	-	-
6	Toba Samosir	1	1	8,44
7	Labuhan Batu	47	59	12,52
8	Asahan	95	66	6,96
9	Simalungun	407	327	8,03
10	Dairi	-	-	-
11	Karo	-	-	-
12	Deli Serdang	718	1 763	10,26
13	Langkat	598	856	14,31
14	Nias Selatan	-	-	-
15	Humbang	9	8	8,44
Hasundutan				
16	Pakpak Barat	13	10	8,07
17	Samosir	2	2	8,36
18	Serdang Bedagai	343	6 174	9,73
19	Batu Bara	105	89	8,47
20	Padang Lawas Utara	151	127	8,44
21	Padang Lawas	312	265	8,49
22	Labuhan Batu Selatan	34	36	10,59
23	Labuhan Batu Utara	275	384	13,95
24	Nias Utara	50	40	7,99
25	Nias Barat	-	-	-
Kota				
26	Sibolga	-	-	-
27	Tanjung Balai	-	-	-
28	Pematangsiantar	-	-	-
29	Tebing Tinggi	-	-	-
30	Medan	-	-	-
31	Binjai	169	217	12,85
32	Padangsidempuan	33	28	8,44
33	Gunung Sitoli	-	-	-
Sumatera Utara		11 413	11 426	10,01

Sumber : Sumatera Utara Dalam Angka 2012, Badan Pusat Statistik Provinsi Sumatera Utara

**Lampiran 2. Permintaan Kedelai di Sumatera Utara Tahun 1997-2012**

Tahun	Permintaan Kedelai (Ton)
1997	12,070
1998	11,026
1999	9,640
2000	10,211
2001	12,542
2002	14,745
2003	14,706
2004	15,399
2005	80,866
2006	84,056
2007	56,580
2008	57,314
2009	58,111
2010	58,617
2011	61,302
2012	60,115

Sumber : Badan Ketahanan Pangan Sumatera Utara

**Lampiran 3. Penawaran Kedelai di Sumatera Utara Tahun 1997-2012**

Tahun	Produksi (Ton)	Impor (Ton)	Total Penawaran (Ton)
1997	39,303	97	39,400
1998	44,503	10,267	54,770
1999	28,817	25,248	54,065
2000	12,881	8,702	21,583
2001	10,719	2,760	13,479
2002	10,197	922	11,119
2003	10,466	38,821	49,287
2004	12,333	12,275	24,608
2005	15,793	45,752	61,545
2006	7,042	34,445	41,487
2007	4,345	58,597	62,942
2008	11,647	65,449	77,096
2009	14,206	71,636	85,842
2010	9,438	83,259	92,697
2011	11,426	106,370	117,796
2012	5,420	110,075	115,495

Sumber : Produksi, Impor : Badan Pusat Statistik Sumatera Utara

**Lampiran 4. Harga Kedelai Tingkat Produsen di Sumatera Utara Tahun 1997-2012**

Tahun	Harga Kedelai (Rp/Kg)
1997	1,069
1998	2,338
1999	2,644
2000	2,514
2001	2,401
2002	2,655
2003	2,200
2004	2,550
2005	2,797
2006	3,220
2007	3,690
2008	6,924
2009	6,685
2010	6,980
2011	8,072
2012	8,946

Sumber : Dinas Pertanian Sumatera Utara

**Lampiran 5. Harga Pakan Ternak Tingkat Eceran di Sumatera Utara Tahun 1997-2012**

Tahun	Harga Pakan Ternak (Rp/Kg)
1997	750
1998	750
1999	1,750
2000	2,200
2001	2,200
2002	2,100
2003	2,400
2004	2,400
2005	2,700
2006	2,700
2007	3,700
2008	3,700
2009	3,700
2010	5,500
2011	5,250
2012	5,450

Sumber : Dinas Peternakan Sumatera Utara

**Lampiran 6. Harga Daging Ayam Tingkat Eceran di Sumatera Utara  
Tahun 1997-2012**

Tahun	Harga Daging Ayam (Rp/Kg)
1997	3,900
1998	3,900
1999	13,500
2000	11,500
2001	11,500
2002	12,500
2003	12,500
2004	12,500
2005	17,000
2006	15,000
2007	17,000
2008	22,500
2009	22,000
2010	24,000
2011	19,500
2012	22,600

Sumber : Dinas Peternakan Sumatera Utara

**Lampiran 7. Luas Areal Kedelai di Sumatera Utara Tahun 1997-2012**

Tahun	Luas Areal (ha)
1997	36,391
1998	42,242
1999	27,171
2000	12,331
2001	10,002
2002	7,705
2003	9,910
2004	11,706
2005	13,787
2006	6,311
2007	3,793
2008	9,597
2009	11,494
2010	7,803
2011	11,413
2012	5,473

Sumber : Badan Pusat Statistik Sumatera Utara

### Lampiran 8. Produktivitas Kedelai di Sumatera Utara Tahun 1997-2012

Tahun	Produktivitas Kedelai (kg/ha)
1997	1,076
1998	1,054
1999	1,061
2000	1,063
2001	1,072
2002	1,051
2003	1,056
2004	1,054
2005	1,145
2006	1,116
2007	1,116
2008	1,214
2009	1,236
2010	1,209
2011	1,001
2012	9,90

Sumber : Badan Pusat Statistik Sumatera Utara

### Lampiran 9. Jumlah Penduduk di Sumatera Utara Tahun 1997-2012

Tahun	Jumlah Penduduk (Jiwa)
1997	11,153,494
1998	11,287,336
1999	11,422,784
2000	11,559,858
2001	11,696,576
2002	11,850,000
2003	11,890,000
2004	12,120,000
2005	12,320,000
2006	12,643,494
2007	12,760,700
2008	13,042,317
2009	13,248,386
2010	12,982,204
2011	13,103,596
2012	13,215,401

Sumber : Badan Pusat Statistik Sumatera Utara

**Lampiran 10. Hasil Analisis Regresi Faktor-Faktor Yang Mempengaruhi  
Permintaan Kedelai di Sumatera Utara**

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	Jumlah penduduk, Harga Kedelai, Harga Daging Ayam, Harga Pakan Ternak <sup>a</sup>		Enter

a. All requested variables entered.

b. Dependent Variable: Jumlah Permintaan Kedelai

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.857 <sup>a</sup>	.735	.638	16,829.50328	.735	7.623	4	11	.003	1.629

a. Predictors: (Constant), Jumlah penduduk, Harga Kedelai, Harga Daging Ayam, Harga Pakan Ternak

b. Dependent Variable: Jumlah Permintaan Kedelai

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.636E9	4	2.159E9	7.623	.003 <sup>a</sup>
	Residual	3.116E9	11	2.832E8		
	Total	1.175E10	15			

a. Predictors: (Constant), Jumlah penduduk, Harga Kedelai, Harga Daging Ayam, Harga Pakan Ternak

b. Dependent Variable: Jumlah Permintaan Kedelai

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-561190.291	185783.079		-3.021	.012		
Harga Kedelai	-4.899	4.450	-.435	-1.101	.294	.154	6.486
Harga Pakan Ternak	-1.983	9.127	-.106	-.217	.832	.102	9.831
Harga Daging Ayam	-.261	2.067	-.057	-.126	.902	.118	8.509
Jumlah penduduk	.051	.017	1.351	2.965	.013	.116	8.610

a. Dependent Variable: Jumlah Permintaan Kedelai

**Collinearity Diagnostics<sup>a</sup>**

Dimensi	Eigenvalue	Condition Index	Variance Proportions				
			(Constant)	Harga Kedelai	Harga Pakan Ternak	Harga Daging Ayam	Jumlah penduduk
1	4.747	1.000	.00	.00	.00	.00	.00
2	.214	4.705	.00	.05	.01	.00	.00
3	.026	13.555	.00	.71	.08	.24	.00
4	.013	19.350	.00	.17	.87	.47	.00
5	.000	146.532	1.00	.07	.04	.29	1.00

a. Dependent Variable: Jumlah Permintaan Kedelai

**Residuals Statistics<sup>a</sup>**

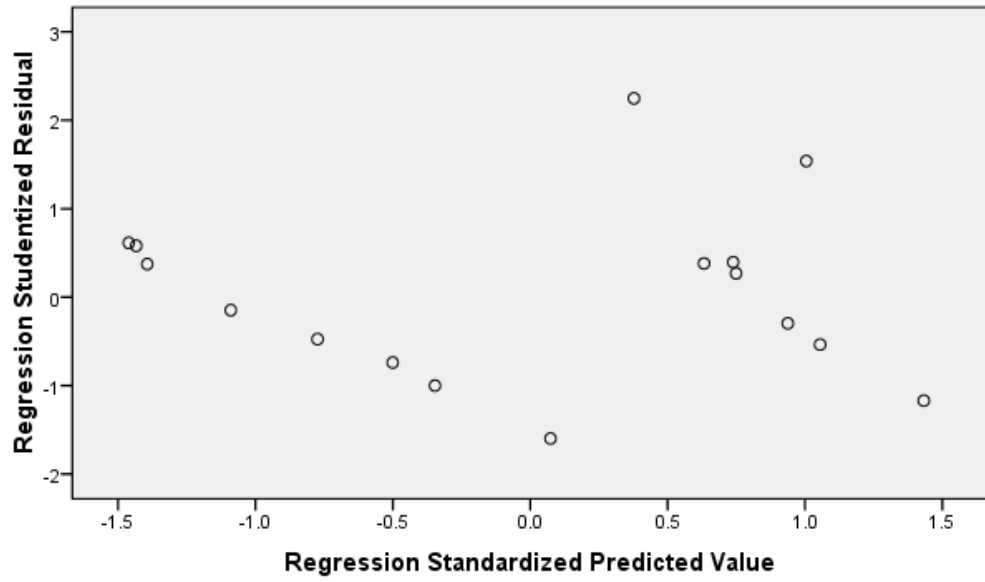
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3,515.7864	72,950.3359	38,581.2500	23,994.86895	16
Std. Predicted Value	-1.461	1.432	.000	1.000	16
Standard Error of Predicted Value	5190.543	1.199E4	9.146E3	2277.701	16
Adjusted Predicted Value	-2,912.5229	84,213.8047	37,485.3082	25,987.44500	16
Residual	-24,951.55469	33,229.50000	3.14628E-11	14,411.92559	16
Std. Residual	-1.483	1.974	.000	.856	16
Stud. Residual	-1.598	2.248	.028	.991	16
Deleted Residual	-28,982.80469	43,070.43750	1,095.94179	19,503.21285	16
Stud. Deleted Residual	-1.739	2.915	.065	1.121	16
Mahal. Distance	.489	6.682	3.750	2.099	16
Cook's Distance	.001	.299	.068	.091	16
Centered Leverage Value	.033	.445	.250	.140	16

a. Dependent Variable: Jumlah Permintaan Kedelai



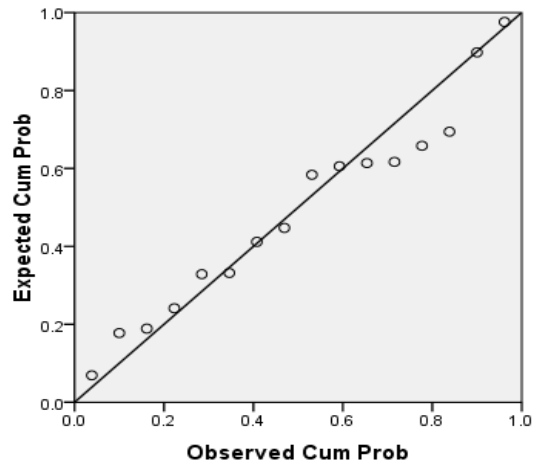
### Scatterplot

Dependent Variable: Jumlah Permintaan Kedelai



**Normal P-P Plot of Regression Standardized Residual**

**Dependent Variable: Jumlah Permintaan Kedelai**



**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		16
Normal Parameters <sup>a</sup>	Mean	.0000000
	Std. Deviation	2.23368322E7
Most Extreme Differences	Absolute	.276
	Positive	.276
	Negative	-.197
Kolmogorov-Smirnov Z		1.105
Asymp. Sig. (2-tailed)		.174

a. Test distribution is Normal.

**Lampiran 11. Hasil Analisis Regresi Faktor-Faktor Yang Mempengaruhi Penawaran Kedelai di Sumatera Utara**

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	Harga Daging Ayam , Luas Areal Kedelai, Harga Kedelai <sup>a</sup>		Enter

a. All requested variables entered.

b. Dependent Variable: Jumlah Penawaran Kedelai

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.920 <sup>a</sup>	.846	.808	14,579.48820	.846	22.035	3	12	.000	2.249

a. Predictors: (Constant), Harga Daging Ayam, Luas Areal Kedelai, Harga Kedelai

b. Dependent Variable: Jumlah Penawaran Kedelai

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.405E10	3	4.684E9	22.035	.000 <sup>a</sup>
	Residual	2.551E9	12	2.126E8		
	Total	1.660E10	15			

a. Predictors: (Constant), Harga Daging Ayam, Luas Areal Kedelai, Harga Kedelai

b. Dependent Variable: Jumlah Penawaran Kedelai

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-31715.283	23383.748		-1.356	.200		
Harga Kedelai	10.396	3.311	.777	3.140	.009	.209	4.783
Luas Areal Kedelai	1.295	.561	.431	2.309	.040	.367	2.725
Harga Daging Ayam	1.868	1.742	.344	1.072	.305	.124	8.052

a. Dependent Variable: Jumlah Penawaran Kedelai

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Harga Kedelai	Luas Areal Kedelai	Harga Daging Ayam
1	1	3.367	1.000	.00	.00	.01	.00
	2	.551	2.472	.00	.02	.16	.00
	3	.073	6.776	.13	.33	.16	.02
	4	.009	19.395	.87	.65	.67	.98

a. Dependent Variable: Jumlah Penawaran Kedelai

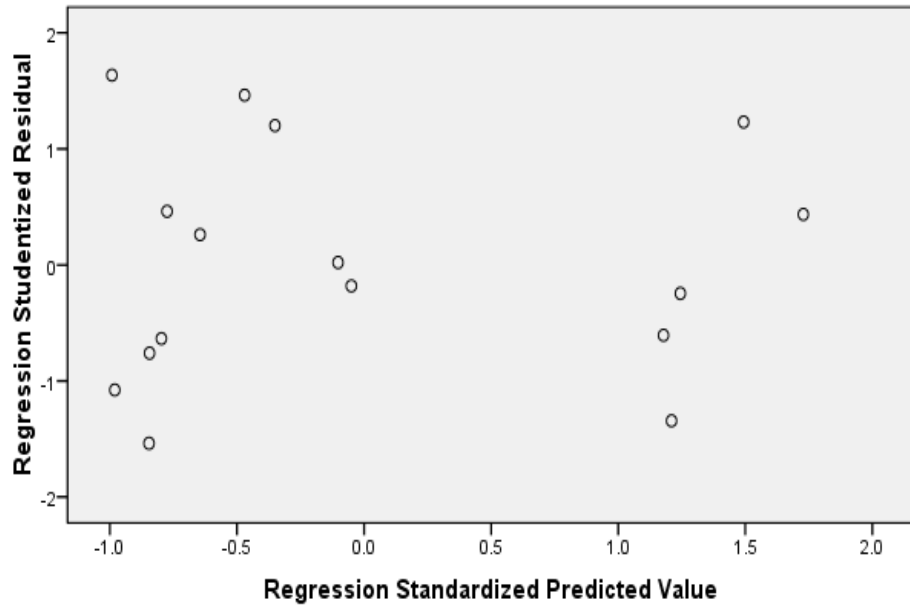
**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	27,337.8379	110,593.4922	57,700.6875	30,606.55236	16
Std. Predicted Value	-.992	1.728	.000	1.000	16
Standard Error of Predicted Value	5001.329	1.074E4	7.097E3	1720.748	16
Adjusted Predicted Value	23,396.8281	107,282.8203	57,007.0208	30,345.32710	16
Residual	-20,683.47852	21,949.16211	2.95586E-12	13,040.29068	16
Std. Residual	-1.419	1.505	.000	.894	16
Stud. Residual	-1.538	1.635	.020	1.000	16
Deleted Residual	-24,298.28516	25,890.17188	693.66665	16,389.57352	16
Stud. Deleted Residual	-1.643	1.776	.029	1.041	16
Mahal. Distance	.828	7.204	2.812	1.853	16
Cook's Distance	.000	.211	.062	.064	16
Centered Leverage Value	.055	.480	.188	.124	16

a. Dependent Variable: Jumlah Penawaran Kedelai

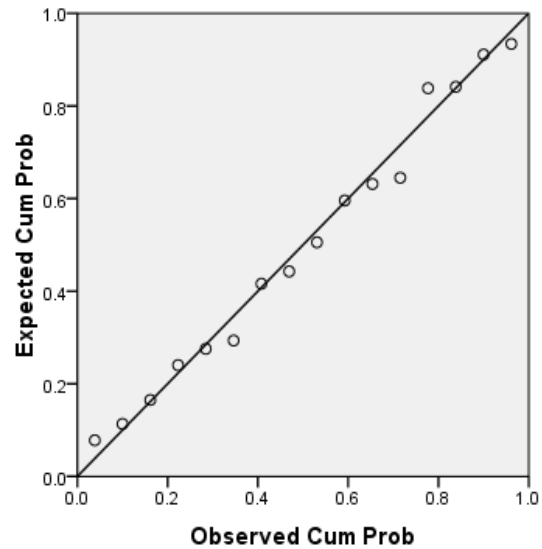
### Scatterplot

Dependent Variable: Jumlah Penawaran Kedelai



Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Jumlah Penawaran Kedelai



One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		16
Normal Parameters <sup>a</sup>	Mean	.0000000
	Std. Deviation	1.30402907E7
Most Extreme Differences	Absolute	.115
	Positive	.103
	Negative	-.115
Kolmogorov-Smirnov Z		.460
Asymp. Sig. (2-tailed)		.984

a. Test distribution is Normal.

**Lampiran 12. Hasil Analisis Regresi Harga Terhadap Permintaan Kedelai di Sumatera Utara**

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	Harga Kedelai <sup>a</sup>		Enter

a. All requested variables entered.

b. Dependent Variable: Jumlah Permintaan Kedelai

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.603 <sup>a</sup>	.363	.318	23,120,817.92250

a. Predictors: (Constant), Harga Kedelai

b. Dependent Variable: Jumlah Permintaan Kedelai

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.268E9	1	4.268E9	7.984	.013 <sup>a</sup>
	Residual	7.484E9	14	5.346E8		
	Total	1.175E10	15			

a. Predictors: (Constant), Harga Kedelai

b. Dependent Variable: Jumlah Permintaan Kedelai

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	10735.670	11425.018		.940	.363		
	Harga Kedelai	6.783	2.401	.603	2.826	.013	1.000	1.000

a. Dependent Variable: Jumlah Permintaan Kedelai



**Lampiran 13. Hasil Analisis Regresi Harga Terhadap Penawaran Kedelai di Sumatera Utara**

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	Harga Kedelai <sup>a</sup>		Enter

- a. All requested variables entered.  
 b. Dependent Variable: Jumlah Penawaran Kedelai

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.274E10	1	1.274E10	46.180	.000 <sup>a</sup>
	Residual	3.862E9	14	2.759E8		
	Total	1.660E10	15			

- a. Predictors: (Constant), Harga Kedelai  
 b. Dependent Variable: Jumlah Penawaran Kedelai

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	9590.789	8207.505		1.169	.262		
	Harga Kedelai	11.719	1.724	.876	6.796	.000	1.000	1.000

- a. Dependent Variable: Jumlah Penawaran Kedelai

**Lampiran 14. Tabel Durbin-Watson (DW)  $\alpha=5\%$**

obs N	$k'=1$		$k'=2$		$k'=3$		$k'=4$		$k'=5$	
	$d_L$	$d_u$	$d_L$	$d_u$	$d_L$	$d_u$	$d_L$	$d_u$	$d_L$	$d_u$
6	0.610	1.400	-	-	-	-	-	-	-	-
7	0.700	1.356	0.467	1.896	-	-	-	-	-	-
8	0.763	1.332	0.559	1.777	0.368	2.287	-	-	-	-
9	0.724	1.320	0.629	1.699	0.455	2.128	0.296	2.588	-	-
10	0.879	1.320	0.697	1.641	0.525	2.016	0.376	1.414	0.243	2.822
11	0.927	1.324	0.658	1.604	0.595	1.928	0.444	2.283	0.316	2.645
12	0.971	1.331	0.812	1.579	0.658	1.864	0.512	2.177	0.379	2.506
13	1.010	1.340	0.861	1.562	0.715	1.816	0.574	1.094	0.445	2.390
14	1.045	1.350	0.905	1.551	0.767	1.779	0.632	2.030	0.505	2.296
15	1.077	1.361	0.946	1.543	0.814	1.750	0.685	1.977	0.562	2.220
16	1.106	1.371	0.982	1.539	0.857	1.728	0.734	1.935	0.615	2.157
17	1.133	1.381	1.015	1.536	0.897	1.710	0.779	1.900	0.664	2.104
18	1.158	1.391	1.046	1.535	0.933	1.696	0.820	1.872	0.710	2.060
19	1.180	1.401	1.074	1.536	0.967	1.685	0.859	1.848	0.752	2.023
20	1.201	1.411	1.100	1.537	0.998	1.676	0.894	1.828	0.792	1.991
21	1.221	1.420	1.125	1.538	1.026	1.669	0.927	1.812	0.829	1.964
22	1.239	1.429	1.147	1.541	1.053	1.664	0.958	1.797	0.863	1.940
23	1.257	1.437	1.168	1.543	1.078	1.660	0.986	1.785	0.895	1.920
24	1.273	1.446	1.188	1.546	1.101	1.656	1.013	1.775	0.925	1.902
25	1.288	1.454	1.206	1.550	1.123	1.654	1.038	1.767	0.953	1.886
26	1.302	1.461	1.224	1.553	1.143	1.652	1.062	1.759	0.979	1.873
27	1.316	1.469	1.240	1.556	1.162	1.651	1.084	1.753	1.004	1.861
28	1.328	1.476	1.255	1.560	1.181	1.650	1.104	1.747	1.028	1.850
29	1.341	1.483	1.270	1.563	1.198	1.650	1.124	1.743	1.050	1.841
30	1.352	1.489	1.284	1.567	1.214	1.650	1.143	1.739	1.071	1.833
31	1.363	1.496	1.297	1.570	1.229	1.650	1.160	1.735	1.090	1.825
32	1.373	1.502	1.309	1.574	1.244	1.650	1.177	1.732	1.109	1.819
33	1.383	1.508	1.321	1.577	1.258	1.651	1.193	1.730	1.127	1.813
34	1.993	1.514	1.333	1.580	1.271	1.652	1.208	1.728	1.144	1.808
35	1.402	1.519	1.343	1.584	1.283	1.653	1.222	1.726	1.160	1.803
36	1.411	1.525	1.354	1.587	1.295	1.654	1.236	1.724	1.175	1.799
37	1.419	1.530	1.364	1.590	1.307	1.655	1.249	1.723	1.190	1.795
38	1.427	1.535	1.373	1.594	1.318	1.656	1.261	1.722	1.204	1.792
39	1.435	1.540	1.382	1.597	1.328	1.658	1.273	1.722	1.218	1.789
40	1.442	1.544	1.391	1.600	1.338	1.659	1.285	1.721	1.230	1.786
45	1.475	1.566	1.430	1.615	1.383	1.666	1.336	1.720	1.287	1.776
50	1.503	1.585	1.462	1.628	1.421	1.674	1.378	1.721	1.335	1.771

