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**Lampiran 1. Data Angka Kematian Dan Variabel Yang Mempengaruhi Di Provinsi Sulawesi Selatan**

Kab/Kota	Y	$X_1$	$X_2$	$X_3$	$X_4$
Selayar	5.6295	1986	2268	109	1913
Bulukumba	10.0471	6735	6467	303	6330
Bantaeng	2.0996	3377	1959	123	3340
Jeneponto	12.6733	7299	6776	268	6560
Takalar	5.3773	5742	6188	225	5745
Gowa	3.4674	13082	14904	341	13592
Sinjai	14.3631	3987	3480	340	4248
Maros	4.4636	7025	11192	282	6693
Pangkep	9.8378	5725	5077	286	5797
Barru	9.8726	3044	3002	225	3132
Bone	5.2483	13184	12866	438	13123
Soppeng	11.7371	2724	3051	215	2978
Wajo	5.3611	6478	6697	386	6337
Sidrap	3.9870	5206	40128	270	5523
Pinrang	4.0554	7136	7991	308	7204
Erekang	12.8326	3085	3484	180	3209
Luwu	9.0866	6352	7158	239	6237
Tana Toraja	5.9693	3767	3842	125	3545
Luwu Utara	6.7231	5192	5575	95	5069
Luwu Timur	8.0257	5622	6150	250	5613
Toraja Utara	7.6760	4481	4604	143	3770
Makassar	1.6179	26232	21202	1625	26957
Pare-Pare	8.0823	2464	1830	157	2721
Palopo	5.1798	3274	3374	126	3279

**Lampiran 2. Hasil standarisasi data angka kematian bayi di Provinsi Sulawesi Selatan Tahun 2020**

Kota/Kab.	$Y$	$X_1$	$X_2$	$X_3$	$X_4$
Selayar	-0.458568	-0.863606	-0.681495	-0.621305	-0.852364
Bulukumba	0.810662	0.069073	-0.172136	0.029785	-0.007925
Bantaeng	-1.472752	-0.590421	-0.718979	-0.574319	-0.579551
Jeneponto	1.565202	0.179840	-0.134653	-0.087679	0.036045
Takalar	-0.531028	-0.125946	-0.205980	-0.231993	-0.119765
Gowa	-1.079766	1.315594	0.851312	0.157318	1.380416
Sinjai	2.050703	-0.470620	-0.534474	0.153962	-0.405960
Maros	-0.793546	0.126028	0.401028	-0.040693	0.061472
Pangkep	0.750528	-0.129285	-0.340750	-0.027268	-0.109824
Barru	0.760526	-0.655820	-0.592458	-0.231993	-0.619316
Bone	-0.568092	1.335626	0.604093	0.482864	1.290753
Soppeng	1.296221	-0.718667	-0.586514	-0.265554	-0.648758
Wajo	-0.535683	0.018600	-0.144236	0.308345	-0.006587
Sidrap	-0.930479	-0.231214	3.911106	-0.080966	-0.162207
Pinrang	-0.910827	0.147828	0.012731	0.046566	0.159164
Enrekang	1.610971	-0.647768	-0.533989	-0.383019	-0.604596
Luwu	0.534699	-0.006145	-0.088315	-0.185007	-0.025705
Tana Toraja	-0.360939	-0.513827	-0.490561	-0.567606	-0.540359
Luwu Utara	-0.144363	-0.233963	-0.280340	-0.668290	-0.249002
Luwu Timur	0.229889	-0.149514	-0.210590	-0.148089	-0.145001
Toraja Utara	0.129416	-0.373600	-0.398127	-0.507196	-0.497344
Makassar	-1.611151	3.89819	1.61529	4.4666	3.935526
Pare-Pare	0.246151	-0.76973	-0.734627	-0.460210	-0.697891
Palopo	-0.587773	-0.610649	-0.547332	-0.56425	-0.591213

Lampiran 3. Uji *DFFITs*

Data ke-	Kota/Kabupaten	<i>DFFITs</i>
1	Selayar	0.348932
2	Bulukumba	0.277559
3	Bantaeng	0.628691
<b>4</b>	<b>Jeneponto</b>	<b>1.363984</b>
5	Takalar	0.135098
6	Gowa	0.901630
7	Sinjai	0.894943
8	Maros	0.289218
9	Pangkep	0.162935
10	Barru	0.097071
11	Bone	0.298821
12	Soppeng	0.410359
13	Wajo	0.288628
14	Sidrap	0.455392
15	Pinrang	0.197644
16	Enrekang	0.466258
17	Luwu	0.152097
18	Tana Toraja	0.188645
19	Luwu Utara	0.008683
20	Luwu Timur	0.035184
21	Toraja Utara	0.188998
<b>22</b>	<b>Makassar</b>	<b>6.656002</b>
23	Pare-Pare	0.084912
24	Palopo	0.268687

Lampiran 4. Matriks *H*

	1	2	3	4	5	6
1	0.008379	0.029852	0.002938	0.042347	0.004514	-0.031452
2	0.029852	0.123772	0.020754	0.189146	0.025705	-0.076305
3	0.002938	0.020754	0.015221	0.031626	0.019391	0.062282
4	0.042347	0.189146	0.031626	0.302390	0.035842	-0.115022
5	0.004514	0.025705	0.019391	0.035842	0.030038	0.101111
6	-0.031452	-0.076305	0.062282	-0.115022	0.101111	0.626046
7	0.006134	-0.009647	-0.009334	-0.043968	-0.008046	-0.064189
8	0.025598	0.107560	0.018924	0.166355	0.032093	-0.017673
9	0.006012	0.019645	0.012971	0.017978	0.020329	0.051744
10	0.007490	0.011432	-0.002857	0.001518	-0.001232	-0.046997
11	0.005951	0.060282	0.056604	0.094837	0.082108	0.310407
12	-0.001009	-0.025125	-0.005535	-0.057948	-0.002170	0.003260
13	0.024697	0.080711	0.006417	0.107095	0.010496	-0.103465
14	0.011870	-0.008342	-0.043137	-0.030821	0.009374	0.016692
15	0.005026	0.022781	0.019844	0.025877	0.032941	0.112408
16	0.001567	-0.003148	0.002294	-0.016120	0.007028	0.023981
17	0.010430	0.052614	0.022719	0.080231	0.033919	0.080400
18	0.012471	0.061420	0.016803	0.098946	0.021878	0.014139
19	0.000631	0.033258	0.031619	0.062991	0.044558	0.182109
20	0.007834	0.032484	0.015195	0.043060	0.024269	0.057073
21	0.037699	0.168528	0.022522	0.273633	0.023564	-0.138297
22	0.034850	0.052820	0.021598	-0.019376	0.043484	-0.008350
23	0.006286	-0.035190	0.000932	-0.067650	0.004832	0.062774
24	0.002109	0.013472	0.011557	0.018827	0.017581	0.062198

Lampiran 4. Lanjutan Matriks  $H$ 

	7	8	9	10	11	12
1	0.006134	0.025598	0.006012	0.007490	0.005951	-0.001009
2	-0.009647	0.107560	0.019645	0.011432	0.060282	-0.025125
3	-0.009334	0.018924	0.012971	-0.002857	0.056604	-0.005535
4	-0.043968	0.166355	0.017978	0.001518	0.094837	-0.057948
5	-0.008046	0.032093	0.020329	-0.001232	0.082108	-0.002170
6	-0.064189	-0.017673	0.051744	-0.046997	0.310407	0.003260
7	0.072724	-0.020279	0.017748	0.038460	-0.050100	0.045872
8	-0.020279	0.112274	0.017710	0.004234	0.077884	-0.025114
9	0.017748	0.017710	0.021991	0.011956	0.047112	0.012452
10	0.038460	0.004234	0.011956	0.022637	-0.020466	0.021708
11	-0.050100	0.077884	0.047112	-0.020466	0.239313	-0.022282
12	0.045872	-0.025114	0.012452	0.021708	-0.022282	0.033943
13	0.035078	0.064763	0.021352	0.030274	0.004568	0.008358
14	0.022641	0.108556	-0.008052	0.018759	-0.031525	0.031650
15	0.002904	0.030688	0.025741	0.004393	0.085353	0.006341
16	0.022223	-0.001689	0.012187	0.011689	0.009984	0.016840
17	-0.016992	0.057138	0.020817	-0.002372	0.092750	-0.012293
18	-0.021892	0.058778	0.010883	-0.003788	0.061691	-0.020788
19	-0.052407	0.047458	0.016999	-0.024703	0.139379	-0.028030
20	0.002768	0.034837	0.019657	0.005739	0.060913	0.001752
21	-0.044543	0.148277	0.007608	-0.001314	0.062896	-0.057097
22	0.213725	0.014187	0.106990	0.122410	0.032437	0.134751
23	0.028653	-0.032288	0.012433	0.010563	0.006549	0.026644
24	-0.005296	0.017055	0.011767	-0.001296	0.048709	-0.001374



Lampiran 4. Lanjutan Matriks  $H$ 

	13	14	15	16	17	18
1	0.024697	0.011870	0.005026	0.001567	0.010430	0.012471
2	0.080711	-0.008342	0.022781	-0.003148	0.052614	0.061420
3	0.006417	-0.043137	0.019844	0.002294	0.022719	0.016803
4	0.107095	-0.030821	0.025877	-0.016120	0.080231	0.098946
5	0.010496	0.009374	0.032941	0.007028	0.033919	0.021878
6	-0.103465	0.016692	0.112408	0.023981	0.080400	0.014139
7	0.035078	0.022641	0.002904	0.022223	-0.016992	-0.021892
8	0.064763	0.108556	0.030688	-0.001689	0.057138	0.058778
9	0.021352	-0.008052	0.025741	0.012187	0.020817	0.010883
10	0.030274	0.018759	0.004393	0.011689	-0.002372	-0.003788
11	0.004568	-0.031525	0.085353	0.009984	0.092750	0.061691
12	0.008358	0.031650	0.006341	0.016840	-0.012293	-0.020788
13	0.077180	0.026457	0.014481	0.009702	0.024615	0.029295
14	0.026457	0.977708	0.026220	0.022357	0.015623	-0.006987
15	0.014481	0.026220	0.038440	0.012232	0.034879	0.019260
16	0.009702	0.022357	0.012232	0.010654	0.003475	-0.003777
17	0.024615	0.015623	0.034879	0.003475	0.044651	0.036113
18	0.029295	-0.006987	0.019260	-0.003777	0.036113	0.036989
19	-0.011133	-0.014569	0.042279	-0.003038	0.053192	0.039003
20	0.022332	0.017283	0.027661	0.007957	0.029228	0.020554
21	0.093780	-0.014002	0.012504	-0.019264	0.064692	0.086597
22	0.151245	-0.028176	0.082602	0.083918	0.028047	-0.009205
23	-0.010178	-0.003927	0.011883	0.014210	-0.006893	-0.019032
24	0.004575	0.000685	0.019204	0.003990	0.019495	0.012286

Lampiran 4. Lanjutan Matriks  $H$ 

	19	20	21	22	23	24
1	0.000631	0.007834	0.037699	0.034850	-0.006286	0.002109
2	0.033258	0.032484	0.168528	0.052820	-0.035190	0.013472
3	0.031619	0.015195	0.022522	0.021598	0.000932	0.011557
4	0.062991	0.043060	0.273633	-0.019376	-0.067650	0.018827
5	0.044558	0.024269	0.023564	0.043484	0.004832	0.017581
6	0.182109	0.057073	-0.138297	-0.008350	0.062774	0.062198
7	-0.052407	0.002768	-0.044543	0.213725	0.028653	-0.005296
8	0.047458	0.034837	0.148277	0.014187	-0.032288	0.017055
9	0.016999	0.019657	0.007608	0.106990	0.012433	0.011767
10	-0.024703	0.005739	-0.001314	0.122410	0.010563	-0.001296
11	0.139379	0.060913	0.062896	0.032437	0.006549	0.048709
12	-0.028030	0.001752	-0.057097	0.134751	0.026644	-0.001374
13	-0.011133	0.022332	0.093780	0.151245	-0.010178	0.004575
14	-0.014569	0.017283	-0.014002	-0.028176	-0.003927	0.000685
15	0.042279	0.027661	0.012504	0.082602	0.011883	0.019204
16	-0.003038	0.007957	-0.019264	0.083918	0.014210	0.003990
17	0.053192	0.029228	0.064692	0.028047	-0.006893	0.019495
18	0.039003	0.020554	0.086597	-0.009205	-0.019032	0.012286
19	0.089950	0.029788	0.047328	-0.064454	-0.007242	0.026592
20	0.029788	0.022331	0.031589	0.066628	0.003118	0.013896
21	0.047328	0.031589	0.251578	-0.054474	-0.067879	0.011731
22	-0.064454	0.066628	-0.054474	0.803136	0.096159	0.023788
23	-0.007242	0.003118	-0.067879	0.096159	0.028302	0.003288
24	0.026592	0.013896	0.011731	0.023788	0.003288	0.010344

**Lampiran 5. Residual S-Estimation**

$$e_i = \begin{bmatrix} 5.6295 \\ 10.0471 \\ 2.0996 \\ 12.6733 \\ 5.3773 \\ 3.4674 \\ 14.3631 \\ 4.4636 \\ 9.8378 \\ 9.8726 \\ 5.2483 \\ 11.7371 \\ 5.3611 \\ 3.9870 \\ 4.0554 \\ 12.8326 \\ 9.0866 \\ 5.9693 \\ 6.7231 \\ 8.0257 \\ 7.6760 \\ 1.6179 \\ 8.0823 \\ 5.1798 \end{bmatrix}_{24 \times 1} - \begin{bmatrix} 0,528019 \\ 0,173738 \\ 0,314981 \\ 0,138775 \\ 0,001357 \\ -1,468735 \\ 0,515480 \\ -0,089643 \\ 0,137710 \\ 0,512038 \\ -0,961614 \\ 0,469848 \\ 0,277873 \\ -0,921671 \\ -0,135777 \\ 0,375951 \\ -0,050097 \\ 0,280591 \\ -0,121741 \\ 0,080694 \\ 0,392536 \\ -1,147353 \\ 0,419666 \\ 0,280086 \end{bmatrix}_{24 \times 1} = \begin{bmatrix} -0,986587 \\ 0,636924 \\ -1,787734 \\ 1,426427 \\ -0,529671 \\ 0,388968 \\ 1,535222 \\ -0,703903 \\ 0,612818 \\ 0,248488 \\ 0,393521 \\ 0,826372 \\ -0,813556 \\ -0,008808 \\ -0,775049 \\ 1,235021 \\ 0,584796 \\ -0,641531 \\ -0,022622 \\ 0,149194 \\ -0,263121 \\ -0,463797 \\ -0,173515 \\ -0,867859 \end{bmatrix}$$

### Lampiran 6. Nilai u S-Estimation

$$\hat{\sigma}_s = \sqrt{\frac{n \sum_{i=1}^n (e_i^2) - (\sum_{i=1}^n e_i)^2}{n(n-1)}}$$

$$= 0.828851$$

$$u = \frac{1}{[0.8288514]} \times \begin{bmatrix} -0,986587 \\ 0,636924 \\ -1,787734 \\ 1,426427 \\ -0,529671 \\ 0,388968 \\ 1,535222 \\ -0,703903 \\ 0,612818 \\ 0,248488 \\ 0,393521 \\ 0,826372 \\ -0,813556 \\ -0,008808 \\ -0,775049 \\ 1,235021 \\ 0,584796 \\ -0,641531 \\ -0,022622 \\ 0,149194 \\ -0,263121 \\ -0,463797 \\ -0,173515 \\ -0,867859 \end{bmatrix}_{24 \times 1} = \begin{bmatrix} -1,190307 \\ 0,768442 \\ -2,156882 \\ 1,720968 \\ -0,639042 \\ 0,469286 \\ 1,852228 \\ -0,849251 \\ 0,739358 \\ 0,299799 \\ 0,474779 \\ 0,997009 \\ -0,981547 \\ -0,010626 \\ -0,935088 \\ 1,490038 \\ 0,705551 \\ -0,773999 \\ -0,027293 \\ 0,180001 \\ -0,317451 \\ -0,559566 \\ -0,209344 \\ -1,047062 \end{bmatrix}$$

**Lampiran 7. Hasil iterasi *robust S-Estimation***

Iterasi	$\hat{\beta}_0$	$\hat{\beta}_1$	$\hat{\beta}_2$	$\hat{\beta}_3$	$\hat{\beta}_4$
1	-0.0558528	-0.1185643	-0.2531229	0.3187807	-0.5010185
2	-0.0558528	-0.1185643	-0.2531229	0.3187807	-0.5010185
3	-0.0558528	-0.1185643	-0.2531229	0.3187807	-0.5010185

### Lampiran 8. Residual MM-Estimation

$$e_i = \begin{bmatrix} 5.6295 \\ 10.0471 \\ 2.0996 \\ 12.6733 \\ 5.3773 \\ 3.4674 \\ 14.3631 \\ 4.4636 \\ 9.8378 \\ 9.8726 \\ 5.2483 \\ 11.7371 \\ 5.3611 \\ 3.9870 \\ 4.0554 \\ 12.8326 \\ 9.0866 \\ 5.9693 \\ 6.7231 \\ 8.0257 \\ 7.6760 \\ 1.6179 \\ 8.0823 \\ 5.1798 \end{bmatrix}_{24 \times 1} - \begin{bmatrix} 0.448032 \\ -0.007004 \\ 0.303424 \\ -0.089101 \\ -0.002731 \\ -1.068786 \\ 0.387707 \\ -0.216075 \\ 0.092058 \\ 0.408203 \\ -0.859884 \\ 0.418202 \\ 0.080046 \\ -0.962971 \\ -0.141502 \\ 0.336928 \\ -0.078867 \\ 0.219029 \\ -0.045435 \\ 0.040619 \\ 0.176712 \\ -1.474811 \\ 0.424311 \\ 0.271427 \end{bmatrix}_{24 \times 1} = \begin{bmatrix} -0.906601 \\ 0.817667 \\ -1.776177 \\ 1.654304 \\ -0.528297 \\ -0.010981 \\ 1.662995 \\ -0.577471 \\ 0.658469 \\ 0.352323 \\ 0.291791 \\ 0.878018 \\ -0.615729 \\ 0.032492 \\ -0.769324 \\ 1.274042 \\ 0.613566 \\ -0.579969 \\ -0.098928 \\ 0.189269 \\ -0.047296 \\ -0.136339 \\ -0.178159 \\ -0.859201 \end{bmatrix}$$

Lampiran 9. Nilai u *MM-Estimation*

$$\hat{\sigma}_{MM} = \frac{\text{median } |e_i - \text{median}(e_i)|}{0,6745} = 0.843159$$

$$u = \frac{1}{[0.843159]} \times \begin{bmatrix} -0.906601 \\ 0.817667 \\ -1.776177 \\ 1.654304 \\ -0.528297 \\ -0.010981 \\ 1.662995 \\ -0.577471 \\ 0.658469 \\ 0.352323 \\ 0.291791 \\ 0.878018 \\ -0.615729 \\ 0.032492 \\ -0.769324 \\ 1.274042 \\ 0.613566 \\ -0.579969 \\ -0.098928 \\ 0.189269 \\ -0.047296 \\ -0.136339 \\ -0.178159 \\ -0.859201 \end{bmatrix}_{24 \times 1} = \begin{bmatrix} -1.075242 \\ 0.969766 \\ -2.106573 \\ 1.962031 \\ -0.626568 \\ -0.013023 \\ 1.972338 \\ -0.684888 \\ 0.780954 \\ 0.417861 \\ 0.346069 \\ 1.041343 \\ -0.730264 \\ 0.038536 \\ -0.912431 \\ 1.511034 \\ 0.727699 \\ -0.687852 \\ -0.117330 \\ 0.224476 \\ -0.056094 \\ -0.161701 \\ -0.211301 \\ -1.019025 \end{bmatrix}$$

**Lampiran 10. Hasil Iterasi *Robust MM - Estimation***

Iterasi	$\hat{\beta}_0$	$\hat{\beta}_1$	$\hat{\beta}_2$	$\hat{\beta}_3$	$\hat{\beta}_4$
<i>S-estimation</i>	-0.055852	-0.118564	-0.253122	0.318781	-0.501018
1	-0.018735	0.776701	-0.246732	0.551858	-1.608233
2	-0.006993	0.982027	-0.245897	0.582774	-1.842971
3	-0.004856	1.012828	-0.246051	0.585251	-1.876347
4	-0.004481	1.018683	-0.246065	0.585675	-1.882652
5	-0.004415	1.019811	-0.246066	0.585749	-1.883859
6	-0.004404	1.020031	-0.246065	0.585763	-1.884093
7	-0.004402	1.020075	-0.246065	0.585765	-1.884138
8	-0.004402	1.020083	-0.246065	0.585765	-1.884148
9	-0.004401	1.020085	-0.246065	0.585766	-1.884149
10	-0.004401	1.020086	-0.246065	0.585766	-1.884150
11	-0.004401	1.020086	-0.246065	0.585766	-1.884150
12	-0.004401	1.020086	-0.246065	0.585766	-1.884150



### Lampiran 11. Riwayat Hidup Peneliti



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#### B. RIWAYAT PENDIDIKAN

1. TK Pertiwi Salemba (2007-2008)
2. SDN 13 Salemba (2008-2014)
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4. UPT SMAN 9 Bulukumba (2017-2020)
5. S1 Program Studi Statistik FMIPA Unhas (2020-2024)