

DAFTAR PUSTAKA

- Akbar, R. dan Hawadi. (2020). *Identifikasi Keberbakatan Intelektual Melalui Metode Non-Tes; dengan Pendekatan Konsep Keberbakatan Renzulli*. Jakarta: Gramedia Widiasarana Indonesia.
- Andana AP, Safitri D, Rusgiyono A. (2017). Model Regresi Menggunakan *Least Absolute Shrinkage Selection Operator (LASSO)* pada Information Banyaknya Gizi Buruk Kabupaten/Kota-di Jawa.Tengah. *Jurnal Gaussian*, 2017;- 6(1): 21-30.
- Bank Dunia. (1990). *Indonesia: Poverty Assesment and Strategy Report*. Report, No. 8034-IND, Country Departement III East Asia Pasific Region. Washington.
- Bappenas. (2004). *Rencana Strategik Penanggulangan Kemiskinan di Indonesia*. Jakarta.
- BPS. (2020). *Profil Kemiskinan Provinsi Sumatera Utara, Maret 2020*. Medan: BPS Sumatera Utara.
- Chaudhuri, S. (2003). *Assessing Vulnerability to Poverty: Concepts, empirical methods and illustrative examples*. Departement of Economics.
- Dewi, Y. S. (2010). OLS, LASSO dan PLS pada Data Mengandung Multikolinearitas. *Jurnal Ilmu. Dasar*, Vol. 11, No. 1: 83-91.
- Djojohadikusumo, Sumitro. (1995). *Perkembangan Pemikiran Ekonomi, Dasar Teori Pertumbuhan dan Ekonomi Pembangunan*. Jakarta: LP3ES.
- Dong Y, Mo X, Hu Y, et al. (2020). Epidemiology of Covid-19 Among Children in China. *American Academy of Pediatrics*, DOI: 10.1542/peds.2020-0702.
- Efron, B, et al. (2004). Least Angle Regression. *The Annals of Statistics*: 32(2):407-499.
- Ghozali, I. (2011). *Aplikasi Analisis Multivariat dengan Program IBM SPSS 19*. Semarang: Badan Penerbit Universitas Diponegoro.
- Gujarati DN. (2006). *Dasar-Dasar Ekonometrika. Edisi Ketiga. Jilid 1*. Jakarta: Erlangga.
- Hanoatubun, S. (2020). Dampak Covid-19 Terhadap Perekonomian Indonesia. *Journal of Busines & Entrepreneurship*, 2 (2): 83-92.

- Hansen, Heimgartner dan Linden. (2002). *Identification Reaction*. Zurich: UoZ. Press.
- Hastie, T, Tibshirani, R and Friedman, J. (2008). *The Elements of Statistical Learning: Data mining, Inference and Prediction*. Edisi ke 2: Springer, New York.
- Izenman, A. J. (2008). *Modern Multivariate Statistical Techniques: Regression-Classification, and Manifold Learning*. New York: Springer.
- Jarnasy, Owin. (2004). *Keadilan, Pemberdayaan dan Penanggulangan Kemiskinan*. Jakarta: Belantika.
- Jolliffe, I. T. (2002). *Principle Component Analysis Second Edition*. New York: Springer-Verlag.
- Kuncoro, M. (2006). *Ekonomi Pembangunan*. Jakarta: Salemba Empat.
- Kurniasih, E. P. (2020). Dampak Pandemi Covid-19 Terhadap Penurunan Kesejahteraan Masyarakat Kota Pontianak. *Prosiding Seminar Akademik Tahunan Ilmu Ekonomi dan Studi Pembangunan 2020*, ISBN: 978-602-53460-5-7, 277-289.
- Last, J. (2001). *A Dictionary of Epidemiology 4th Edition*. New York: Oxford University Press.
- Lubis, F. A. (2018). Miskin Menurut Pandangan Islam. *Tansiq*, Vol. 1, No. 1, Januari-Juni 2018.
- Lubis, F. R. A. (2020). Analisis Pengaruh *External Shock* Terhadap Pengeluaran Konsumsi Masyarakat Indonesia. *Jurnal REP: Riset Ekonomi Pembangunan*. Vol. 5, No. 1: 38-46
- Misno, A. B. P., Junediyono., Nurhadi., et al. (2020). Covid-19. *Pustaka Amma Alamiah*. ISBN: 978-623-92323-5-1.
- Montgomery, D. C. and Peck, A. E. (1992). *Introduction to Linear Regression Analysis. A Wiley-Interscience Publication*, New York.
- Nalim, Y & Salafudin, T. (2012). *Statistika Deskriptif*. Pekalongan: STAIN Pekalongan Press.
- Ngadi, R. M & Purba, Y. A. (2020). Dampak Pandemi Covid-19 Terhadap PHK dan Pendapatan Pekerja di Indonesia. *Jurnal Kependudukan Indonesia*. 43-48

- Pakinde, H dan Setiawan, A. (2009). *Studi Simulasi dan Studi Kasus Masalah Multikolinearitas dalam Model Regresi Linier*. Salatiga: Paper Universitas Kristen Satya Wacana.
- Prabowo FK,-Rusgiyono A,-Wilandari Y.-(2015).-Pemodelan Pertumbuhan-Ekonomi Jawa-Tengah Menggunakan Pendekatann *Least Absolute Shrinkage Selection Operator (LASSO)*. *Jurnal Gaussian*. 2015; 4(4): 855-864.
- Prasetyo, A. A. (2010). *Analisis Faktor-Faktor yang Mempengaruhi Tingkat Kemiskinan*. Semarang: Skripsi.
- Ren.L-L, Wang.Y-M, Wu.Z-Q, Xiang.Z-C, Guo.L, Xu.T, et.al. (2020). ID of a Novel.Coronavirus Causing.Severe Pneumonia-in Human:.adescriptive study. *Chin.Med J*. 2020;.published online.February 11.aDOI: 10.1097CM9.00000000000000722.
- Robbani, M. (2017). Faktor-Faktor yang Mempengaruhi Inflasi yang Terjadi di Indonesia dari Tahun 2014-2017 dengan Menggunakan Metode LASSO. Skripsi: Universitas Pendidikan Indonesia.
- Sartika, I, Debataraja, N. N, & Imro'ah, N. (2020). Analisis Regresi dengan Metode *Least Absolute Shrinkage Selection Operator (LASSO)* dalam Mengatasi Multikolinearitas. *Buletin Ilmiah Math. Stat. dan Terapannya (Bimaster)*, Vol. 09, No. 1: 31-38.
- Sembiring, L.J. (2020). *BNPB Tetapkan Masa Darurat Bencana Virus Corona hingga 29 Mei*. <https://www.cnbcindonesia.com/news/20200317124119-4-145464/bnpb-tetapkan-masa-darurat-bencana-virus-corona-hingga-29-mei> (Diakses 14 Maret 2021)
- Shih,.T.- P., Lai,.C.- C., Tang,.H.- J, Hsueh., Ko., & W.- C., P.- R.- (2020). Extreme Acute.Respiratory Syndrome Corona virus 2-(SARS-Cov-2) and Corona Virus Disease-2019-(Coronavirus):thePestilence andthe.Challenges *Journal International of Antimicrobial.Agents*,.55(3), 05924.
- Soleh, A. M & Aunuddin. (2013). LASSO:Solusi AlternatifSeleksi Peubah dan Penyusutan Koefisien Model Regresi.*Indonesian Journalof Statistics*. 18 (1):21-27

- Spicker, Paul. (2002). *Poverty and the Welfare State: Dispelling the Myths, A Catalyst Working*. London: Catalyst.
- Sukirno, Sadono. (2004). *Makroekonomi Teori Pengantar Edisi Ketiga*. Jakarta: PT. RajaGrafindo Persada.
- Sukirno, Sadono. (2013). *Makroekonomi Teori Pengantar*. Jakarta: PT. RajaGrafindo Persada.
- Suryawati. (2004). *Teori Ekonomi Mikro, UPP*. AMP YKPN. Yogyakarta: Jarnasy.
- Tibshirani R. (1996). Regression Shrinkage and Selection Via the LASSO. *Journal of the Royal Statistical Society Series B (Methodological)*. 1996; 58(1): 267-288.
- Undang-Undang Republik Indonesia Nomor 13 Tahun 2003 Tentang Ketenagakerjaan.
- Wardana, Raditya. (2020). Pengertian Analisis Regresi dan Penerapannya Secara Nyata. https://lifepalco.id/cdn.ampproject.org/v/s/lifepal.co.id/media/regresi/amp/?amp_js_v=a6&_gsa=1&usqp=mq331AQHKAFQArABIA%3D%3D#aoh=16189813170963&csi=1&referrer=https%3A%2F%2Fwww.google.com&_tf=Dari%20%251%24s (Diakses 30 Oktober 2020)
- Yuniati T, Susanti Y, Wibowo, S. (2010). Pemilihan Model Regresi Linier Terbaik Berdasarkan Modifikasi Statistik *cp* Mallows.
- Zhao, P., & Yu, B.- (2006). On Model Selection Consistency of Lasso. *Journal of Machine Learning Research* 7, 2541-2562.

Lampiran 1 Data yang di *standardized* (Zskor)

PM	PDRB	KRT	TPT	BAK	PSM	BSP	IPM	PHK	UMK
-	-	-	-	-	-	-	-	-	-
0.24241	0.30904	0.46582	0.70817	1.22355	0.28619	0.21557	1.95065	0.87888	0.67343
-	-	-	-	-	-	-	-	-	-
0.15821	0.24083	1.21476	0.35466	0.53245	0.18125	0.15091	0.87981	0.67363	0.25689
-	-	-	-	-	-	-	-	-	-
0.23852	0.23512	1.43052	0.37979	0.92127	0.22396	0.21114	0.14607	0.52436	0.54433
-	-	-	-	-	-	-	-	-	-
0.13099	0.26662	0.03268	0.72188	0.04096	0.19789	0.14355	0.34217	0.64565	0.28793
-	-	-	-	-	-	-	-	-	-
0.21793	0.27923	0.77828	0.90238	1.34123	0.20808	0.19111	0.59206	0.43107	0.77432
-	-	-	-	-	-	-	-	-	-
0.27514	0.28267	0.51044	1.05774	1.22932	0.26235	0.25768	0.96444	0.65498	0.28866
-	-	-	-	-	-	-	-	-	-
0.15423	0.09525	0.18892	0.19576	0.65129	0.15927	0.18407	0.27037	0.32845	0.19388
-	-	-	-	-	-	-	-	-	-
0.04244	0.06716	0.66508	0.61595	1.26162	0.09173	0.05218	0.10861	0.44042	0.23055
-	-	-	-	-	-	-	-	-	-
0.00855	0.06234	0.24596	0.32329	0.14715	0.02239	0.00953	0.54359	0.50186	0.50728
-	-	-	-	-	-	-	-	-	-
0.24329	0.27235	0.67663	1.32257	0.03865	0.23684	0.21666	0.17342	0.33394	0.87289
-	-	-	-	-	-	-	-	-	-
0.18015	0.19096	0.77084	1.29432	1.54314	0.13638	0.20751	0.80359	0.22198	1.13883
-	-	-	-	-	-	-	-	-	-
0.04986	0.43092	1.13382	1.41396	0.38362	0.55536	0.17208	1.02613	0.70711	1.55896
-	-	-	-	-	-	-	-	-	-
0.12212	0.03564	0.07148	0.53827	0.07326	0.08586	0.23681	0.04783	0.41792	0.13805
-	-	-	-	-	-	-	-	-	-
0.10002	0.28725	1.33628	0.47513	0.75974	0.21372	0.15676	1.95946	0.73894	2.14539
-	-	-	-	-	-	-	-	-	-
0.26648	0.29471	1.46276	1.64389	1.91233	0.25649	0.23897	0.42152	0.74827	0.80243
-	-	-	-	-	-	-	-	-	-
0.32819	0.32852	0.66172	1.25901	2.12232	0.32227	0.32576	0.70353	0.11003	1.34788
-	-	-	-	-	-	-	-	-	-
0.27634	0.30562	0.02524	1.51677	2.12116	0.30969	0.28858	0.03374	0.49638	0.35986
-	-	-	-	-	-	-	-	-	-
0.12178	0.13766	0.21036	0.01568	0.08482	0.09412	0.09422	0.11963	0.00741	0.42442
-	-	-	-	-	-	-	-	-	-
0.11923	0.09295	0.03023	0.34764	0.16787	0.17917	0.07279	0.53387	0.07271	1.56955
-	-	-	-	-	-	-	-	-	-
0.22542	0.25229	1.13292	0.84235	0.52092	0.24685	0.27083	0.20556	0.38442	0.06365
-	-	-	-	-	-	-	-	-	-
0.23894	0.25344	0.09224	0.48925	0.73551	0.22671	0.24715	0.55811	0.40308	0.01412
-	-	-	-	-	-	-	-	-	-
0.21691	0.14053	0.05412	0.21034	1.10933	0.22832	0.26941	0.13596	0.07656	0.64356
-	-	-	-	-	-	-	-	-	-
0.18807	0.16173	0.25836	0.46765	0.28555	0.20541	0.18912	0.18223	0.12323	0.42441
-	-	-	-	-	-	-	-	-	-
0.18862	0.31133	0.45341	0.33742	0.36401	0.29273	0.20883	1.85591	0.84156	0.85391
-	-	-	-	-	-	-	-	-	-
0.24607	0.32394	1.22716	1.33669	2.16039	0.32395	0.26088	2.04319	0.67363	0.38072
-	-	-	-	-	-	-	-	-	-
0.30088	0.29815	0.59316	0.88431	0.02019	0.31072	0.31328	0.62732	0.30979	0.90306
-	-	-	-	-	-	-	-	-	-
0.24047	0.27293	0.86508	0.52061	0.54399	0.27976	0.22279	0.46997	0.00192	0.25787
-	-	-	-	-	-	-	-	-	-
0.25116	0.24026	1.53308	2.12016	0.01211	0.23576	0.23218	1.75546	0.52985	0.88244

-	-	-	-	-	-	-	-	-	-
0.27389	0.29471	1.10652	1.58345	0.14826	0.27627	0.27079	0.96664	0.42723	0.75321
0.50018	1.35141	2.44571	1.85182	0.80012	0.56234	0.26673	2.24681	1.25754	1.67965
-	-	-	-	-	-	-	-	-	-
0.27579	0.25516	1.72652	1.12088	0.62475	0.23454	0.23825	1.12529	0.33394	0.47995
-	-	-	-	-	-	-	-	-	-
0.27278	0.29184	1.84803	0.69013	0.30978	0.24959	0.28529	0.97766	0.23131	0.26167
-	-	-	-	-	-	-	-	-	-
0.24047	0.29723	0.66756	0.15692	0.89242	0.29512	0.25024	0.32455	0.62699	3.03234
-	-	-	-	-	-	-	-	-	-
5.59096	5.39449	0.72956	0.49943	0.21748	5.53915	5.60033	0.21749	4.84934	0.88984



Lampiran 2 Syntax Uji Multikolinearitas pada *software Rstudio*

```
> View(datarevisiindahnew)
```

```
> read.csv("F:/datarevisiindahnew.csv")
```

UMK	PM	PDRB	KRT	TPT	BAK	PSM	BSP	IPM	PHK
1 2560336	23.12	0.49	58.03	3.49	81.16	74942	17384	61.93	67
2 2691808	41.31	1.68	61.05	6.50	65.94	206000	25745	66.79	89
3 2903042	23.96	1.78	61.92	4.42	78.54	152658	17957	70.12	105
4 2830884	47.19	1.23	56.02	7.54	70.91	185218	26696	69.23	92
5 2542836	28.41	1.01	59.29	2.94	82.18	172493	20547	73.47	115
6 2668615	16.05	0.95	58.21	2.50	81.21	104719	11939	75.16	91
7 2695289	42.17	4.22	55.39	6.05	64.91	233444	21456	72.01	126
8 2814735	66.32	4.71	53.47	7.24	59.62	317794	38509	70.29	114
9 2607089	73.64	4.80	55.16	4.58	71.83	460319	44023	73.25	215
10 2504195	22.93	1.13	58.88	1.75	70.22	136573	17243	71.57	197
11 3070354	36.57	2.55	59.26	1.83	83.93	262029	18426	74.43	185
12 3188592	86.26	13.40	51.58	9.50	67.23	1125931	67505	75.44	237
13 2711000	101.87	5.26	56.44	7.02	69.92	539583	75874	71.00	206
14 2146073	53.88	0.87	61.54	4.15	77.14	165452	24988	61.89	82
15 2524033	17.92	0.74	62.05	0.84	87.13	112029	14359	68.87	81
16 2370519	4.59	0.15	58.82	1.93	88.95	29879	3137	67.59	173
17 2648577	15.80	0.55	56.05	1.20	52.17	45588	7944	70.63	108
18 2869292	49.18	3.48	57.00	5.54	69.82	314818	33074	70.24	162
19 3191571	49.78	4.26	56.03	6.48	69.10	208595	35845	68.36	169

20	26.79	1.48	60.72	3.11	66.04	124078	10243	69.85	120
2767764									
21	23.87	1.46	55.78	4.11	76.93	149219	13301	68.25	118
2753827									
22	28.63	3.43	56.37	4.90	60.94	147212	10423	71.40	153
2930970									
23	34.86	3.06	55.11	6.82	68.08	175830	20804	71.61	148
2869293									
24	34.74	0.45	57.98	4.54	73.71	66776	18259	62.36	71
2509536									
25	22.33	0.23	61.10	1.71	51.83	27785	11525	61.51	89
2642706									
26	10.49	0.68	53.76	8.00	70.38	44305	4750	73.63	128
3004000									
27	23.54	1.12	59.64	6.97	65.84	82977	16451	68.65	161
2822425									
28	21.23	1.69	49.97	11.50	70.45	137927	15236	78.75	218
2501519									
29	16.32	0.74	51.69	9.98	69.27	87334	10244	75.17	207
2537876									
30	183.54	29.46	46.29	10.74	63.62	1134643	79742	80.98	296
3222557									
31	15.91	1.43	49.19	8.67	65.14	139445	14452	75.89	197
2614781									
32	16.56	0.79	48.70	7.45	73.24	120647	8369	75.22	186
2676209									
33	23.54	0.70	53.46	5.94	62.82	63815	12901	69.31	94
3603246									
34	1283.29	100.00	53.21	6.91	68.67	7350057	769342	71.77	681
2499423									

```
> data<-read.csv("F:/ datarevisiindahnew.csv",header = TRUE)
```

```
> matrik<-data.matrix(data)
```

```
> Y<-matrik[,c(1)]
```

```
> X<-matrik[,c(2,3,4,5,6,7,8,9,10)]
```

```
> MKT<-lm(Y~X)
```

```
> library(faraway)
```

```
> vif(MKT)
```

	XPDRB	XKRT	XTPT	XBAK	XPSM	XBSP
XIPM						
	65.217147	3.948039	2.555124	1.322292	304.118421	180.374784
	3.178770					
	XPHK	XUMK				
	12.436160	1.442006				

Lampiran 3 Syntax Regresi LASSO Menggunakan Algoritma LARS pada *software Rstudio*

```
> View(datazskorrevisiindahnew)
```

```
> read.csv("F:/ datazskorrevisiindahnew.csv")
```

IPM	PM PHK	PDRB	KRT	TPT	BAK	PSM	BSP
1	-0.24241 -1.95065	-0.30904 -0.87888	0.46582	-0.70817	1.22355	-0.28619	-0.21557
2	-0.15821 -0.87981	-0.24083 -0.67363	1.21476	0.35466	-0.53245	-0.18125	-0.15091
3	-0.23852 -0.14607	-0.23512 -0.52436	1.43052	-0.37979	0.92127	-0.22396	-0.21114
4	-0.13099 -0.34217	-0.26662 -0.64565	-0.03268	0.72188	0.04096	-0.19789	-0.14355
5	-0.21793 0.59206	-0.27923 -0.43107	0.77828	-0.90238	1.34123	-0.20808	-0.19111
6	-0.27514 0.96444	-0.28267 -0.65498	0.51044	-1.05774	1.22932	-0.26235	-0.25768
7	-0.15423 0.27037	-0.09525 -0.32845	-0.18892	0.19576	-0.65129	-0.15927	-0.18407
8	-0.04244 -0.10861	-0.06716 -0.44042	-0.66508	0.61595	-1.26162	-0.09173	-0.05218
9	-0.00855 0.54359	-0.06234 0.50186	-0.24596	-0.32329	0.14715	0.02239	-0.00953
10	-0.24329 0.17342	-0.27235 0.33394	0.67663	-1.32257	-0.03865	-0.23684	-0.21666
11	-0.18015 0.80359	-0.19096 0.22198	0.77084	-1.29432	1.54314	-0.13638	-0.20751
12	0.04986 1.02613	0.43092 0.70711	-1.13382	1.41396	-0.38362	0.55536	0.17208
13	0.12212 0.04783	-0.03564 0.41792	0.07148	0.53827	-0.07326	0.08586	0.23681
14	-0.10002 -1.95946	-0.28725 -0.73894	1.33628	-0.47513	0.75974	-0.21372	-0.15676
15	-0.26648 -0.42152	-0.29471 -0.74827	1.46276	-1.64389	1.91233	-0.25649	-0.23897
16	-0.32819 -0.70353	-0.32852 0.11003	0.66172	-1.25901	2.12232	-0.32227	-0.32576
17	-0.27634 -0.03374	-0.30562 -0.49638	-0.02524	-1.51677	-2.12116	-0.30969	-0.28858
18	-0.12178 -0.11963	-0.13766 0.00741	0.21036	0.01568	-0.08482	-0.09412	-0.09422
19	-0.11923 -0.53387	-0.09295 0.07271	-0.03023	0.34764	-0.16787	-0.17917	-0.07279

20 -0.22542 -0.25229 1.13292 -0.84235 -0.52092 -0.24685 -0.27083
 -0.20556 -0.38442
 21 -0.23894 -0.25344 -0.09224 -0.48925 0.73551 -0.22671 -0.24715
 -0.55811 -0.40308
 22 -0.21691 -0.14053 0.05412 -0.21034 -1.10933 -0.22832 -0.26941
 0.13596 -0.07656
 23 -0.18807 -0.16173 -0.25836 0.46765 -0.28555 -0.20541 -0.18912
 0.18223 -0.12323
 24 -0.18862 -0.31133 0.45341 -0.33742 0.36401 -0.29273 -0.20883
 -1.85591 -0.84156
 25 -0.24607 -0.32394 1.22716 -1.33669 -2.16039 -0.32395 -0.26088
 -2.04319 -0.67363
 26 -0.30088 -0.29815 -0.59316 0.88431 -0.02019 -0.31072 -0.31328
 0.62732 -0.30979
 27 -0.24047 -0.27293 0.86508 0.52061 -0.54399 -0.27976 -0.22279
 -0.46997 -0.00192
 28 -0.25116 -0.24026 -1.53308 2.12016 -0.01211 -0.23576 -0.23218
 1.75546 0.52985
 29 -0.27389 -0.29471 -1.10652 1.58345 -0.14826 -0.27627 -0.27079
 0.96664 0.42723
 30 0.50018 1.35141 -2.44571 1.85182 -0.80012 0.56234 0.26673
 2.24681 1.25754
 31 -0.27579 -0.25516 -1.72652 1.12088 -0.62475 -0.23454 -0.23825
 1.12529 0.33394
 32 -0.27278 -0.29184 -1.84803 0.69013 0.30978 -0.24959 -0.28529
 0.97766 0.23131
 33 -0.24047 -0.29723 -0.66756 0.15692 -0.89242 -0.29512 -0.25024
 -0.32455 -0.62699
 34 5.59096 5.39449 -0.72956 0.49943 -0.21748 5.53915 5.60033
 0.21749 4.84934

UMK

1 -0.67343
 2 -0.25689
 3 0.54433
 4 0.28793
 5 -0.77432
 6 -0.28866
 7 -0.19388
 8 0.23055
 9 -0.50728
 10 -0.87289
 11 1.13883

12 1.55896
 13 -0.13805
 14 -2.14539
 15 -0.80243
 16 -1.34788
 17 -0.35986
 18 0.42442
 19 1.56955
 20 0.06365
 21 0.01412
 22 0.64356
 23 0.42441
 24 -0.85391
 25 -0.38072
 26 0.90306
 27 0.25787
 28 -0.88244
 29 -0.75321
 30 1.67965
 31 -0.47995
 32 -0.26167
 33 3.03234
 34 -0.88984



```
> data<-read.csv("F:/ datazskorrevisiindahnew.csv",header = TRUE)
> matrik<-data.matrix(data)
> Y<-matrik[,c(1)]
> X<-matrik[,c(2,3,4,5,6,7,8,9,10)]
> MKT<-lm(Y~X)
> library(lars)
> LARSS<-lars(X,Y,type = c("lasso"),trace = TRUE,normalize =
TRUE,intercept = TRUE)
```

LASSO sequence

Computing X'X

LARS Step 1 :	Variable 6	added
LARS Step 2 :	Variable 1	added
LARS Step 3 :	variable 9	added

```

LARS Step 4 :      Variable 7      added
LARS Step 5 :      Variable 3      added
LARS Step 6 :      Variable 4      added
LARS Step 7 :      Variable 8      added
LARS Step 8 :      Variable 2      added
LARS Step 9 :      Variable 5      added
Computing residuals, RSS etc .....

```

```
> LARSS
```

```
call:
```

```
lars(x = X, y = Y, type = c("lasso"), trace = TRUE, normalize = TRUE,
```

```
  intercept = TRUE)
```

```
R-squared: 0.998
```

```
Sequence of LASSO moves:
```

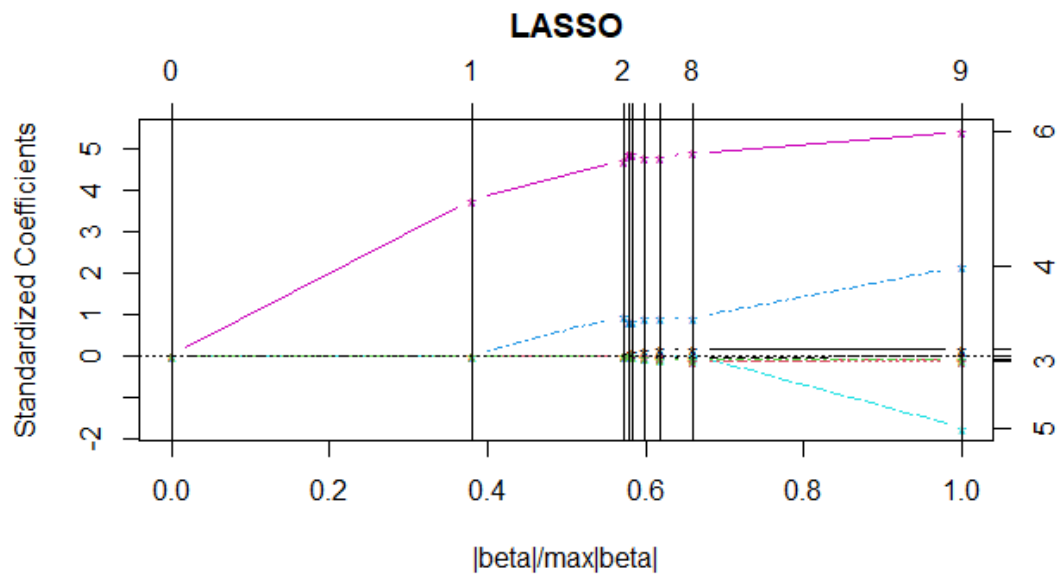
	BSP	BAK	PDRB	UMK	TPT	IPM	KRT	PHK	PSM
Var	6	1	9	7	3	4	8	2	5
Step	1	2	3	4	5	6	7	8	9

```
> coef(LARSS)
```

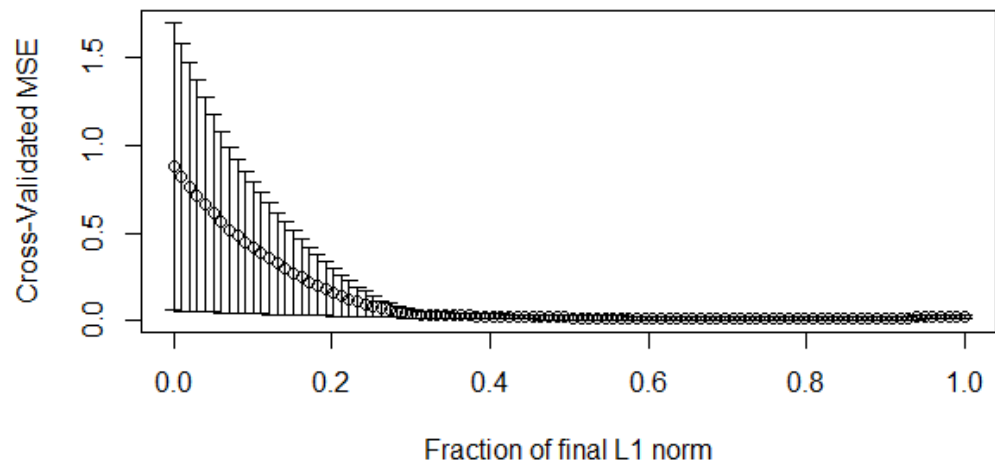
	BSP	PDRB	KRT	TPT	BAK	PSM
BSP						
[1,]	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
[2,]	0.6392656	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
[3,]	0.8154921	0.1762263	0.0000000	0.0000000	0.0000000	0.0000000
[4,]	0.8154757	0.1762508	0.0000000	0.0000000	0.0000000	0.0000000
[5,]	0.7952000	0.2012455	0.0000000	0.0000000	0.0000000	0.0000000
[6,]	0.7841461	0.2150135	0.0000000	-0.001803608	0.0000000	0.0000000
[7,]	0.7721358	0.2301057	0.0000000	-0.005395061	-0.004164851	0.0000000
[8,]	0.7756291	0.2398665	0.0000000	-0.005448673	-0.005517908	0.0000000
[9,]	0.7787957	0.2425993	-0.002545521	-0.006689149	-0.005760185	0.0000000
[10,]	0.9611664	0.3247089	-0.005088365	-0.009246902	-0.003883607	-0.2607777

	IPM	PHK	UMK
[1,]	0.000000000	0.000000000	0.000000e+00
[2,]	0.000000000	0.000000000	0.000000e+00
[3,]	0.000000000	0.000000000	0.000000e+00
[4,]	0.000000000	0.000000000	-1.000724e-05
[5,]	-0.005950126	0.000000000	-1.123551e-03
[6,]	-0.008282947	0.000000000	-1.123551e-02
[7,]	-0.010117191	0.000000000	-1.115153e-02
[8,]	-0.006398896	-0.01447986	-1.150310e-02
[9,]	-0.005579546	-0.02117390	-1.229031e-02
[10,]	0.001125984	-0.02448410	-1.134275e-02

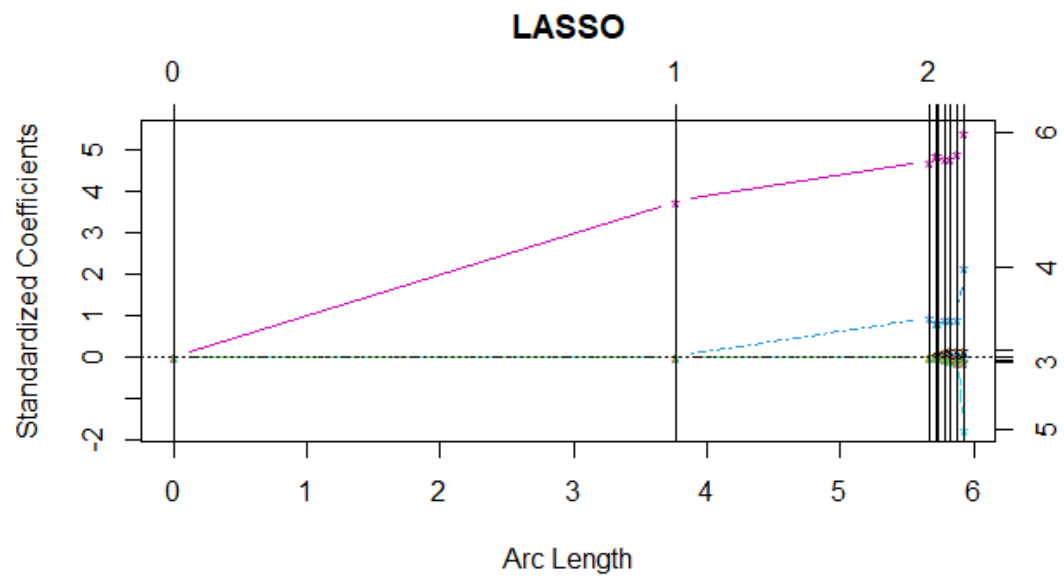
```
> plot(LARSS)
```



```
> cv.lars(X,Y,k=5,index = seq(from=0,to=1,length=100),plot.it = TRUE)
```



```
> plot(LARSS,xvar = c("arc.length"),breaks = TRUE,plottype =
c("coefficients"))
```



Lampiran 4 Syntax Uji Multikolinearitas setelah Dilakukan Analisis LASSO menggunakan *software Rstudio*

```
> view(dataterbaiklasso)
```

```
> read.csv("F:/ dataterbaiklasso.csv")
```

	PM	BSP	PDRB	UMK	IPM	TPT	BAK
1	23.12	-0.21557	-0.30904	-0.67343	-1.95065	-0.70817	1.22355
2	41.31	-0.15091	-0.24083	-0.25689	-0.87981	0.35466	-0.53245
3	23.96	-0.21114	-0.23512	0.54433	-0.14607	-0.37979	0.92127
4	47.19	-0.14355	-0.26662	0.28793	-0.34217	0.72188	0.04096
5	28.41	-0.19111	-0.27923	-0.77432	0.59206	-0.90238	1.34123
6	16.05	-0.25768	-0.28267	-0.28866	0.96444	-1.05774	1.22932
7	42.17	-0.18407	-0.09525	-0.19388	0.27037	0.19576	-0.65129
8	66.32	-0.05218	-0.06716	0.23055	-0.10861	0.61595	-1.26162
9	73.64	-0.00953	-0.06234	-0.50728	0.54359	-0.32329	0.14715
10	22.93	-0.21666	-0.27235	-0.87289	0.17342	-1.32257	-0.03865
11	36.57	-0.20751	-0.19096	1.13883	0.80359	-1.29432	1.54314
12	86.26	0.17208	0.43092	1.55896	1.02613	1.41396	-0.38362
13	101.87	0.23681	-0.03564	-0.13805	0.04783	0.53827	-0.07326
14	53.88	-0.15676	-0.28725	-2.14539	-1.95946	-0.47513	0.75974
15	17.92	-0.23897	-0.29471	-0.80243	-0.42152	-1.64389	1.91233
16	4.59	-0.32576	-0.32852	-1.34788	-0.70353	-1.25901	2.12232
17	15.80	-0.28858	-0.30562	-0.35986	-0.03374	-1.51677	-2.12116
18	49.18	-0.09422	-0.13766	0.42442	-0.11963	0.01568	-0.08482
19	49.78	-0.07279	-0.09295	1.56955	-0.53387	0.34764	-0.16787
20	26.79	-0.27083	-0.25229	0.06365	-0.20556	-0.84235	-0.52092
21	23.87	-0.24715	-0.25344	0.01412	-0.55811	-0.48925	0.73551
22	28.63	-0.26941	-0.14053	0.64356	0.13596	-0.21034	-1.10933
23	34.86	-0.18912	-0.16173	0.42441	0.18223	0.46765	-0.28555
24	34.74	-0.20883	-0.31133	-0.85391	-1.85591	-0.33742	0.36401
25	22.33	-0.26088	-0.32394	-0.38072	-2.04319	-1.33669	-2.16039
26	10.49	-0.31328	-0.29815	0.90306	0.62732	0.88431	-0.02019
27	23.54	-0.22279	-0.27293	0.25787	-0.46997	0.52061	-0.54399
28	21.23	-0.23218	-0.24026	-0.88244	1.75546	2.12016	-0.01211
29	16.32	-0.27079	-0.29471	-0.75321	0.96664	1.58345	-0.14826
30	183.54	0.26673	1.35141	1.67965	2.24681	1.85182	-0.80012
31	15.91	-0.23825	-0.25516	-0.47995	1.12529	1.12088	-0.62475

```
32 16.56 -0.28529 -0.29184 -0.26167 0.97766 0.69013 0.30978
33 23.54 -0.25024 -0.29723 3.03234 -0.32455 0.15692 -0.89242
34 1283.29 5.60033 5.39449 -0.88984 0.21749 0.49943 -0.21748
> data<-read.csv("F:/ dataterbaiklasso.csv",header = TRUE)
> matrik<-data.matrix(data)
> Y<-matrik[,c(1)]
> X<-matrik[,c(2,3,4,5,6,7)]
> MKT<-lm(Y~X)
> library(faraway)
> vif(MKT)
```

	XBSP	XPDRB	XUMK	XIPM	XTPT	XBAK
	34.264191	34.975869	1.360947	1.732967	1.594313	1.234829



Lampiran 5 Surat Izin Penelitian**BADAN PUSAT STATISTIK
PROVINSI SUMATERA UTARA**

Medan, 27 Oktober 2021

Nomor : B-1177/BPS/1252/10/2021
Hal : Izin Riset

Kepada Yth,
Wakil Dekan Bidang Akademik dan Kelembagaan
Fakultas Sains dan Teknologi
Universitas Islam Negeri Sumatera Utara Medan
di
Tempat

Dengan Hormat,

Menindaklanjuti Surat Nomor: B.490/ST.I/ST.V.2/TL.00/6/2021 tanggal 25 Oktober 2021 perihal diatas. Bersama dengan ini diberitahukan bahwa mahasiswa Fakultas Sains dan Teknologi Universitas Islam Negeri Sumatera Utara Medan

Nama : Nur Indah Sari
NIM : 0703172054
Program Studi : Matematika
Judul : Identifikasi Faktor-Faktor yang Mempengaruhi Kemiskinan Akibat Pandemi Covid-19 di Sumatera Utara dengan Analisis LASSO

Diberikan Izin riset di Badan Pusat Statistik Provinsi Sumatera Utara di Jalan Asrama No.179 Medan. Kegiatan ini dilaksanakan guna menyelesaikan skripsi pada Fakultas Sains dan Teknologi Universitas Islam Negeri Sumatera Utara Medan.

Demikian surat ini diperbuat untuk digunakan seperlunya.

A.n. Kepala BPS Provinsi Sumatera Utara
Sub Koordinator Fungsi Diseminasi dan Layanan Statistik

Diana Aulia Adnan



PEMERINTAH PROVINSI SUMATERA UTARA
DINAS TENAGA KERJA

Jalan Asrama No. 143 Medan Telp: (061)8452261 – 8452551
Website : www.disnaker.sumutprov.go.id; Email : disnaker@sumutprov.go.id
Medan – 20126 disnaker@sumutprov.go.id
Medan – 20126

Nomor : 071/1590 -1/DTK/XI/2021
Lampiran : -
Perihal : Izin Riset

Medan, 29 Oktober 2021
Kepada Yth.
Dekan Fakultas Sains dan Teknologi
Universitas Islam Negeri Sumatera
Utara (UINSU)
di-
Tempat

1. Sehubungan dengan surat Fakultas Sains dan Teknologi Universitas Islam Negeri Sumatera Utara (UINSU) Nomor B.958/ST.I/ST.V.2/TL.00/10/2021 tanggal 26 Oktober 2021 perihal Izin Riset, dengan ini disampaikan bahwa untuk pelaksanaan Riset pada Dinas Tenaga Kerja Provinsi Sumatera Utara terhadap mahasiswa, yang namanya tersebut dibawah ini :

No	NAMA	NIM	Program Studi
1	Nur Indah Sari	0703172054	Matematika

2. Pada prinsipnya kami tidak keberatan dan menerima mahasiswa tersebut untuk melaksanakan Riset pada Dinas Tenaga Kerja Provinsi Sumatera Utara guna penyusunan Skripsi (Karya Ilmiah) dengan judul "**Identifikasi Faktor-Faktor yang Mempengaruhi Kemiskinan Akibat Pandemi Covid-19 di Sumatera Utara dengan Analisis LASSO**".
3. Demikian disampaikan untuk dimaklumi, atas perhatiannya diucapkan terima kasih.

An. KEPALA DINAS TENAGA KERJA
Ub. KASUBBAG UMUM DAN KEPEGAWAIAN


Drs. Tumajur Stanipar, MIP
Perata Tk. I
NIP. 19680611 19881 1 001