Attachment 1

The Samples of Companies’Data

**Data of Sampled Companies Listed on the Indonesia Stock Exchange**

**in 2016-2018**

|  |  |  |
| --- | --- | --- |
| **No.** | **Company Names** | **Company Codes** |
| 1 | PT. Astra Agro Lestari Tbk | AALI |
| 2 | PT. Adhi Karya Persero Tbk | ADHI |
| 3 | PT. AKR Corporindo Tbk | AKRA |
| 4 | PT. Aneka Tambang Tbk | ANTM |
| 5 | PT. Astra Graphia Tbk | ASGR |
| 6 | PT. Astra International Tbk | ASII |
| 7 | PT. Adi Sarana Armada Tbk | ASSA |
| 8 | PT. Astra Otoparts Tbk | AUTO |
| 9 | PT. Sepatu Bata Tbk | BATA |
| 10 | PT. Bekasi Fajar Industrial Estate Tbk | BEST |
| 11 | PT. Catur Sentosa Adiprana Tbk | CSAP |
| 12 | PT. Central Omega Resources Tbk | DKFT |
| 13 | PT. Darya-Varia Laboratoria Tbk | DVLA |
| 14 | PT. Hanjaya Mandala Sampoerna Tbk | HMSP |
| 15 | PT. Indal Aluminium Industry Tbk | INAI |
| 16 | PT. Indospring Tbk | INDS |
| 17 | PT. Indo Tambangraya Megah Tbk | ITMG |
| 18 | PT. Kimia Farma Tbk | KAEF |
| 19 | PT. Multi Bintang Indonesia Tbk | MLBI |
| 20 | PT. Media Nusantara Citra Tbk | MNCN |
| 21 | PT. Metrodata Electronics Tbk | MTDL |
| 22 | PT. Surya Citra Media Tbk | SCMA |
| 23 | PT. Sidomulya Selaras Tbk | SDMU |
| 24 | PT. Semen Gresik Tbk | SMGR |
| 25 | PT. Selamat Sempurna Tbk | SMSM |
| 26 | PT. Summarecon Agung Tbk | SMRA |
| 27 | PT. Tunas Baru Lampung Tbk | TBLA |
| 28 | PT. Mandom Indonesia Tbk | TCID |
| 29 | PT. Tigaraksa Satria Tbk | TGKA |
| 30 | PT. Surya Toto Indonesia Tbk | TOTO |
| 31 | PT. Total Bangun Persada Tbk | TOTL |
| 32 | PT. Trisula International Tbk | TRIS |
| 33 | PT. Tunas Ridean Tbk | TURI |
| 34 | PT. United Tractors Tbk | UNTR |
| 35 | PT. Unilever Indonesia Tbk | UNVR |

Attachment 2

Data of Dividend Payout Ratio

**The Calculation of Dividend Payout Ratio (DPR)**

Formula : 

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Company Code** | **Year** | **DPS** | **EPS** | **DPR** |
| 1 | AALI | 2016 | 325,00 | 502,00 | 0,6474104 |
|  |  | 2017 | 230,00 | 500,00 | 0,4600000 |
|  |  | 2018 | 420,00 | 1253,17 | 0,3351501 |
| 2 | ADHI | 2016 | 40,00 | 191,17 | 0,2092379 |
|  |  | 2017 | 65,00 | 205,26 | 0,3166715 |
|  |  | 2018 | 19,00 | 61,00 | 0,3114754 |
| 3 | AKRA | 2016 | 150,00 | 441,00 | 0,3401361 |
|  |  | 2017 | 326,00 | 814,00 | 0,4004914 |
|  |  | 2018 | 65,12 | 536,67 | 0,1213409 |
| 4 | ANTM | 2016 | 440,00 | 1348,00 | 0,3264095 |
|  |  | 2017 | 290,00 | 917,00 | 0,3162486 |
|  |  | 2018 | 450,10 | 1610,00 | 0,2795652 |
| 5 | ASGR | 2016 | 100,00 | 362,13 | 0,2761439 |
|  |  | 2017 | 60,00 | 366,00 | 0,1639344 |
|  |  | 2018 | 90,00 | 590,00 | 0,1525424 |
| 6 | ASII | 2016 | 1500,00 | 1929,70 | 0,7773229 |
|  |  | 2017 | 435,00 | 1551,00 | 0,2804642 |
|  |  | 2018 | 1305,00 | 2660,00 | 0,4906015 |
| 7 | ASSA | 2016 | 20,00 | 155,00 | 0,1290323 |
|  |  | 2017 | 40,00 | 290,00 | 0,1379310 |
|  |  | 2018 | 50,00 | 182,00 | 0,2747253 |
| 8 | AUTO | 2016 | 40,00 | 266,00 | 0,1503759 |
|  |  | 2017 | 12,00 | 41,00 | 0,2926829 |
|  |  | 2018 | 12,00 | 87,00 | 0,1379310 |
| 9 | BATA | 2016 | 0,72 | 6,20 | 0,1161290 |
|  |  | 2017 | 3,00 | 12,27 | 0,2444988 |
|  |  | 2018 | 7,12 | 28,00 | 0,2542857 |
| 10 | BEST | 2016 | 4,00 | 9,30 | 0,4301075 |
|  |  | 2017 | 3,00 | 10,00 | 0,3000000 |
|  |  | 2018 | 3,00 | 7,57 | 0,3963012 |
| 11 | CSAP | 2016 | 500,00 | 982,00 | 0,5091650 |
|  |  | 2017 | 250,00 | 524,00 | 0,4770992 |
|  |  | 2018 | 250,00 | 750,00 | 0,3333333 |
| 12 | DKFT | 2016 | 200,00 | 544,00 | 0,3676471 |
|  |  | 2017 | 145,00 | 805,00 | 0,1801242 |
|  |  | 2018 | 295,06 | 827,00 | 0,3567836 |
| 13 | DVLA | 2016 | 5,00 | 13,00 | 0,3846154 |
|  |  | 2017 | 35,00 | 70,00 | 0,5000000 |
|  |  | 2018 | 31,01 | 115,00 | 0,2696522 |
| 14 | HMSP | 2016 | 18,71 | 31,00 | 0,6035484 |
|  |  | 2017 | 14,00 | 28,00 | 0,5000000 |
|  |  | 2018 | 15,38 | 35,31 | 0,4355707 |
| 15 | INAI | 2016 | 3,00 | 10,00 | 0,3000000 |
|  |  | 2017 | 2,00 | 8,00 | 0,2500000 |
|  |  | 2018 | 2,38 | 9,40 | 0,2531915 |
| 16 | INDS | 2016 | 100,00 | 366,00 | 0,2732240 |
|  |  | 2017 | 100,00 | 396,85 | 0,2519844 |
|  |  | 2018 | 125,00 | 486,00 | 0,2572016 |
| 17 | ITMG | 2016 | 17,00 | 67,21 | 0,2529386 |
|  |  | 2017 | 8,00 | 38,00 | 0,2105263 |
|  |  | 2018 | 28,00 | 92,00 | 0,3043478 |
| 18 | KAEF | 2016 | 40,00 | 428,00 | 0,0934579 |
|  |  | 2017 | 30,00 | 278,00 | 0,1079137 |
|  |  | 2018 | 30,00 | 619,00 | 0,0484653 |
| 19 | MLBI | 2016 | 2,00 | 23,00 | 0,0869565 |
|  |  | 2017 | 1,00 | 22,00 | 0,0454545 |
|  |  | 2018 | 0,99 | 55,00 | 0,0180000 |
| 20 | MNCN | 2016 | 102,00 | 203,00 | 0,5024631 |
|  |  | 2017 | 105,00 | 211,00 | 0,4976303 |
|  |  | 2018 | 105,33 | 315,00 | 0,3343810 |
| 21 | MTDL | 2016 | 100,00 | 814,98 | 0,1227024 |
|  |  | 2017 | 135,00 | 568,00 | 0,2376761 |
|  |  | 2018 | 135,00 | 704,00 | 0,1917614 |
| 22 | SCMA | 2016 | 22,00 | 43,00 | 0,5116279 |
|  |  | 2017 | 22,00 | 44,40 | 0,4954955 |
|  |  | 2018 | 22,00 | 51,93 | 0,4236472 |
| 23 | SDMU | 2016 | 60,00 | 89,00 | 0,6741573 |
|  |  | 2017 | 20,00 | 25,00 | 0,8000000 |
|  |  | 2018 | 25,00 | 44,00 | 0,5681818 |
| 24 | SMGR | 2016 | 300,00 | 2092,94 | 0,1433390 |
|  |  | 2017 | 150,00 | 366,00 | 0,4098361 |
|  |  | 2018 | 200,00 | 828,00 | 0,2415459 |
| 25 | SMSM | 2016 | 267,51 | 1688,90 | 0,1583930 |
|  |  | 2017 | 476,84 | 2184,13 | 0,2183203 |
|  |  | 2018 | 109,09 | 299,00 | 0,3648495 |
| 26 | SMRA | 2016 | 15,00 | 77,00 | 0,1948052 |
|  |  | 2017 | 13,00 | 61,00 | 0,2131148 |
|  |  | 2018 | 5,86 | 26,18 | 0,2238350 |
| 27 | TBLA | 2016 | 22,55 | 45,66 | 0,4938677 |
|  |  | 2017 | 13,53 | 45,97 | 0,2943224 |
|  |  | 2018 | 20,00 | 56,00 | 0,3571429 |
| 28 | TCID | 2016 | 40,00 | 197,68 | 0,2023472 |
|  |  | 2017 | 60,00 | 154,36 | 0,3887017 |
|  |  | 2018 | 11,98 | 104,51 | 0,1146302 |
| 29 | TGKA | 2016 | 3,00 | 3,85 | 0,7792208 |
|  |  | 2017 | 1,18 | 19,23 | 0,0613625 |
|  |  | 2018 | 6,77 | 20,85 | 0,3247002 |
| 30 | TOTO | 2016 | 220,00 | 595,00 | 0,3697479 |
|  |  | 2017 | 250,00 | 553,00 | 0,4520796 |
|  |  | 2018 | 240,37 | 591,00 | 0,4067174 |
| 31 | TOTL | 2016 | 144,90 | 396,51 | 0,3654385 |
|  |  | 2017 | 218,75 | 547,15 | 0,3997990 |
|  |  | 2018 | 309,00 | 644,00 | 0,4798137 |
| 32 | TRIS | 2016 | 40,00 | 65,96 | 0,6064281 |
|  |  | 2017 | 25,00 | 60,57 | 0,4127456 |
|  |  | 2018 | 25,00 | 62,00 | 0,4032258 |
| 33 | TURI | 2016 | 19,00 | 102,00 | 0,1862745 |
|  |  | 2017 | 5,00 | 16,00 | 0,3125000 |
|  |  | 2018 | 55,00 | 136,00 | 0,4044118 |
| 34 | UNTR | 2016 | 110,00 | 369,00 | 0,2981030 |
|  |  | 2017 | 154,88 | 326,00 | 0,4750920 |
|  |  | 2018 | 150,00 | 524,00 | 0,2862595 |
| 35 | UNVR | 2016 | 120,00 | 189,00 | 0,6349206 |
|  |  | 2017 | 125,00 | 226,00 | 0,5530973 |
|  |  | 2018 | 167,00 | 257,00 | 0,6498054 |

Attachment 3

Data of Insider Ownership

**The Calculation of Insider Ownership (INSDR)**

Formula :

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Company Code** | **Year** | **Total of circulating shares** | **Total shares owned by the manager and the board of commisioners** | **INSDR** |
| 1 | AALI | 2016 | 1574745000 | 1110500 | 0,0007052 |
|  |  | 2017 | 1574745000 | 212000 | 0,0001346 |
|  |  | 2018 | 1574745000 | 94000 | 0,0000597 |
| 2 | ADHI | 2016 | 624000000 | 893900 | 0,0014325 |
|  |  | 2017 | 624000000 | 893900 | 0,0014325 |
|  |  | 2018 | 3120000000 | 4005000 | 0,0012837 |
| 3 | AKRA | 2016 | 1907691950 | 317250 | 0,0001663 |
|  |  | 2017 | 1907691950 | 227250 | 0,0001191 |
|  |  | 2018 | 9538459750 | 1586250 | 0,0001663 |
| 4 | ANTM | 2016 | 4048355314 | 2059000 | 0,0005086 |
|  |  | 2017 | 4048355314 | 1164000 | 0,0002875 |
|  |  | 2018 | 4048355314 | 1114000 | 0,0002752 |
| 5 | ASGR | 2016 | 771157280 | 677000 | 0,0008779 |
|  |  | 2017 | 771157280 | 344000 | 0,0004461 |
|  |  | 2018 | 771157280 | 292000 | 0,0003787 |
| 6 | ASII | 2016 | 13000000 | 1223 | 0,0000941 |
|  |  | 2017 | 13000000 | 1223 | 0,0000941 |
|  |  | 2018 | 13000000 | 1223 | 0,0000941 |
| 7 | ASSA | 2016 | 4157214436 | 2620800 | 0,0006304 |
|  |  | 2017 | 4157572436 | 2620800 | 0,0006304 |
|  |  | 2018 | 4159010436 | 2683200 | 0,0006452 |
| 8 | AUTO | 2016 | 450000000 | 77875000 | 0,1730556 |
|  |  | 2017 | 450000000 | 105821728 | 0,2351594 |
|  |  | 2018 | 450000000 | 114291351 | 0,2539808 |
| 9 | BATA | 2016 | 575112500 | 3110000 | 0,0054076 |
|  |  | 2017 | 575112500 | 3110000 | 0,0054076 |
|  |  | 2018 | 575112500 | 3110000 | 0,0054076 |
| 10 | BEST | 2016 | 223608000 | 14259000 | 0,0637678 |
|  |  | 2017 | 559020000 | 32878752 | 0,0588150 |
|  |  | 2018 | 559020000 | 27990752 | 0,0500711 |
| 11 | CSAP | 2016 | 1924088000 | 39712400 | 0,0206396 |
|  |  | 2017 | 1924088000 | 39712400 | 0,0206396 |
|  |  | 2018 | 1924088000 | 39712400 | 0,0206396 |
| 12 | DKFT | 2016 | 4383000000 | 88710000 | 0,0202396 |
|  |  | 2017 | 4383000000 | 88710000 | 0,0202396 |
|  |  | 2018 | 4383000000 | 89932295 | 0,0205184 |
| 13 | DVLA | 2016 | 8528589000 | 4089800 | 0,0004795 |
|  |  | 2017 | 8528589000 | 3848300 | 0,0004512 |
|  |  | 2018 | 8780426500 | 3898300 | 0,0004440 |
| 14 | HMSP | 2016 | 654351707 | 40536500 | 0,0619491 |
|  |  | 2017 | 654351707 | 40536500 | 0,0619491 |
|  |  | 2018 | 654351707 | 40536500 | 0,0619491 |
| 15 | INAI | 2016 | 5554000000 | 22514500 | 0,0040537 |
|  |  | 2017 | 5554000000 | 21640000 | 0,0038963 |
|  |  | 2018 | 5554000000 | 15179000 | 0,0027330 |
| 16 | INDS | 2016 | 52016000 | 92500 | 0,0017783 |
|  |  | 2017 | 52016000 | 92500 | 0,0017783 |
|  |  | 2018 | 52016000 | 92500 | 0,0017783 |
| 17 | ITMG | 2016 | 9600000 | 2459500 | 0,2561979 |
|  |  | 2017 | 9600000 | 2456500 | 0,2558854 |
|  |  | 2018 | 9600000 | 2456500 | 0,2558854 |
| 18 | KAEF | 2016 | 780000000 | 28329600 | 0,0363200 |
|  |  | 2017 | 780000000 | 28329600 | 0,0363200 |
|  |  | 2018 | 780000000 | 28329600 | 0,0363200 |
| 19 | MLBI | 2016 | 345440000 | 52886500 | 0,1530989 |
|  |  | 2017 | 345440000 | 52886500 | 0,1530989 |
|  |  | 2018 | 345440000 | 30000000 | 0,0868458 |
| 20 | MNCN | 2016 | 2304131850 | 16117500 | 0,0069950 |
|  |  | 2017 | 2304131850 | 8175500 | 0,0035482 |
|  |  | 2018 | 2304131850 | 5506500 | 0,0023898 |
| 21 | MTDL | 2016 | 102600000 | 191120 | 0,0018628 |
|  |  | 2017 | 102600000 | 191120 | 0,0018628 |
|  |  | 2018 | 102600000 | 37600 | 0,0003665 |
| 22 | SCMA | 2016 | 7032000000 | 260000000 | 0,0369738 |
|  |  | 2017 | 7064000000 | 260000000 | 0,0368063 |
|  |  | 2018 | 7064000000 | 260000000 | 0,0368063 |
| 23 | SDMU | 2016 | 609130000 | 697500 | 0,0011451 |
|  |  | 2017 | 609130000 | 684750 | 0,0011241 |
|  |  | 2018 | 609130000 | 684750 | 0,0011241 |
| 24 | SMGR | 2016 | 163756000 | 3738723 | 0,0228311 |
|  |  | 2017 | 163756000 | 637109 | 0,0038906 |
|  |  | 2018 | 163756000 | 4142109 | 0,0252944 |
| 25 | SMSM | 2016 | 593152000 | 200 | 0,0000003 |
|  |  | 2017 | 593152000 | 200 | 0,0000003 |
|  |  | 2018 | 593152000 | 200 | 0,0000003 |
| 26 | SMRA | 2016 | 1967204800 | 7000000 | 0,0035583 |
|  |  | 2017 | 2754086720 | 9800000 | 0,0035583 |
|  |  | 2018 | 3213101173 | 10183797 | 0,0031695 |
| 27 | TBLA | 2016 | 1298668800 | 86533805 | 0,0666327 |
|  |  | 2017 | 1439668860 | 118375866 | 0,0822244 |
|  |  | 2018 | 1439668860 | 118970366 | 0,0826373 |
| 28 | TCID | 2016 | 180000000 | 90000 | 0,0005000 |
|  |  | 2017 | 180000000 | 90000 | 0,0005000 |
|  |  | 2018 | 900000000 | 351225 | 0,0003903 |
| 29 | TGKA | 2016 | 1615387200 | 1711800 | 0,0010597 |
|  |  | 2017 | 4124206046 | 4208400 | 0,0010204 |
|  |  | 2018 | 4163178493 | 4208400 | 0,0010109 |
| 30 | TOTO | 2016 | 156000000 | 2815700 | 0,0180494 |
|  |  | 2017 | 180960000 | 1355233 | 0,0074891 |
|  |  | 2018 | 180960000 | 1355233 | 0,0074891 |
| 31 | TOTL | 2016 | 20159999280 | 78332 | 0,0000039 |
|  |  | 2017 | 20159999280 | 56624 | 0,0000028 |
|  |  | 2018 | 20159999280 | 23112 | 0,0000011 |
| 32 | TRIS | 2016 | 450000000 | 514000 | 0,0011422 |
|  |  | 2017 | 450000000 | 468500 | 0,0010411 |
|  |  | 2018 | 4500000000 | 3900150 | 0,0008667 |
| 33 | TURI | 2016 | 1395000000 | 2500 | 0,0000018 |
|  |  | 2017 | 1395000000 | 2500 | 0,0000018 |
|  |  | 2018 | 1395000000 | 2500 | 0,0000018 |
| 34 | UNTR | 2016 | 2851609100 | 1154740 | 0,0004049 |
|  |  | 2017 | 2851609100 | 340 | 0,0000001 |
|  |  | 2018 | 2851609100 | 21840 | 0,0000077 |
| 35 | UNVR | 2016 | 7630000000 | 76300 | 0,0000100 |
|  |  | 2017 | 7630000000 | 76300 | 0,0000100 |
|  |  | 2018 | 7630000000 | 76300 | 0,0000100 |

Attachment 4

Data of Institutional Ownership

**The Calculation of Institutional Ownership (INST)**

Formula :

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Company Code** | **Year** | **Total of circulating shares** | **Total shares owned by the institution** | **INST** |
| 1 | AALI | 2016 | 1574745000 | 1254831088 | 0,7968472 |
|  |  | 2017 | 1574745000 | 1254831088 | 0,7968472 |
|  |  | 2018 | 1574745000 | 1254831088 | 0,7968472 |
| 2 | ADHI | 2016 | 624000000 | 444506720 | 0,7123505 |
|  |  | 2017 | 624000000 | 444506720 | 0,7123505 |
|  |  | 2018 | 3120000000 | 2222533600 | 0,7123505 |
| 3 | AKRA | 2016 | 1907691950 | 1428284700 | 0,7486978 |
|  |  | 2017 | 1907691950 | 1407984600 | 0,7380566 |
|  |  | 2018 | 9538459750 | 7141423499 | 0,7486978 |
| 4 | ANTM | 2016 | 4048355314 | 2028825504 | 0,5011481 |
|  |  | 2017 | 4048355314 | 2028825504 | 0,5011481 |
|  |  | 2018 | 4048355314 | 2028825504 | 0,5011481 |
| 5 | ASGR | 2016 | 771157280 | 668772614 | 0,8672324 |
|  |  | 2017 | 771157280 | 668772614 | 0,8672324 |
|  |  | 2018 | 771157280 | 668772614 | 0,8672324 |
| 6 | ASII | 2016 | 13000000 | 10929500 | 0,8407308 |
|  |  | 2017 | 13000000 | 10904500 | 0,8388077 |
|  |  | 2018 | 13000000 | 11039081 | 0,8491601 |
| 7 | ASSA | 2016 | 4157214436 | 2166725519 | 0,5211965 |
|  |  | 2017 | 4157572436 | 2166725519 | 0,5211516 |
|  |  | 2018 | 4159010436 | 2450215820 | 0,5891343 |
| 8 | AUTO | 2016 | 450000000 | 227284160 | 0,5050759 |
|  |  | 2017 | 450000000 | 256053762 | 0,5690084 |
|  |  | 2018 | 450000000 | 296154682 | 0,6581215 |
| 9 | BATA | 2016 | 575112500 | 446890000 | 0,7770480 |
|  |  | 2017 | 575112500 | 446890000 | 0,7770480 |
|  |  | 2018 | 575112500 | 446890000 | 0,7770480 |
| 10 | BEST | 2016 | 223608000 | 163804300 | 0,7325512 |
|  |  | 2017 | 559020000 | 415760580 | 0,7437311 |
|  |  | 2018 | 559020000 | 415760580 | 0,7437311 |
| 11 | CSAP | 2016 | 1924088000 | 1387669700 | 0,7212091 |
|  |  | 2017 | 1924088000 | 1387669700 | 0,7212091 |
|  |  | 2018 | 1924088000 | 1387669700 | 0,7212091 |
| 12 | DKFT | 2016 | 4383000000 | 4293067705 | 0,9794816 |
|  |  | 2017 | 4383000000 | 4293067705 | 0,9794816 |
|  |  | 2018 | 4383000000 | 4293067705 | 0,9794816 |
| 13 | DVLA | 2016 | 8528589000 | 4394603450 | 0,5152791 |
|  |  | 2017 | 8528589000 | 4394603450 | 0,5152791 |
|  |  | 2018 | 8780426500 | 4394603450 | 0,5005000 |
| 14 | HMSP | 2016 | 654351707 | 381713464 | 0,5833460 |
|  |  | 2017 | 654351707 | 438154964 | 0,6696016 |
|  |  | 2018 | 654351707 | 438154964 | 0,6696016 |
| 15 | INAI | 2016 | 5554000000 | 5000000000 | 0,9002521 |
|  |  | 2017 | 5554000000 | 5000000000 | 0,9002521 |
|  |  | 2018 | 5554000000 | 5000000000 | 0,9002521 |
| 16 | INDS | 2016 | 52016000 | 30012000 | 0,5769763 |
|  |  | 2017 | 52016000 | 30012000 | 0,5769763 |
|  |  | 2018 | 52016000 | 30012000 | 0,5769763 |
| 17 | ITMG | 2016 | 9600000 | 7143500 | 0,7441146 |
|  |  | 2017 | 9600000 | 7143500 | 0,7441146 |
|  |  | 2018 | 9600000 | 7143500 | 0,7441146 |
| 18 | KAEF | 2016 | 780000000 | 491670400 | 0,6303467 |
|  |  | 2017 | 780000000 | 531806400 | 0,6818031 |
|  |  | 2018 | 780000000 | 491670400 | 0,6303467 |
| 19 | MLBI | 2016 | 345440000 | 187005600 | 0,5413548 |
|  |  | 2017 | 345440000 | 179196480 | 0,5187485 |
|  |  | 2018 | 345440000 | 179196480 | 0,5187485 |
| 20 | MNCN | 2016 | 2304131850 | 1498087500 | 0,6501744 |
|  |  | 2017 | 2304131850 | 1498087500 | 0,6501744 |
|  |  | 2018 | 2304131850 | 2006717676 | 0,8709214 |
| 21 | MTDL | 2016 | 102600000 | 81425700 | 0,7936228 |
|  |  | 2017 | 102600000 | 79925700 | 0,7790029 |
|  |  | 2018 | 102600000 | 79925700 | 0,7790029 |
| 22 | SCMA | 2016 | 7032000000 | 4385000000 | 0,6235779 |
|  |  | 2017 | 7064000000 | 4065000000 | 0,5754530 |
|  |  | 2018 | 7064000000 | 4065000000 | 0,5754530 |
| 23 | SDMU | 2016 | 609130000 | 589892140 | 0,9684175 |
|  |  | 2017 | 609130000 | 589892140 | 0,9684175 |
|  |  | 2018 | 609130000 | 560032140 | 0,9193967 |
| 24 | SMGR | 2016 | 163756000 | 108867703 | 0,6648166 |
|  |  | 2017 | 163756000 | 108867703 | 0,6648166 |
|  |  | 2018 | 163756000 | 110461203 | 0,6745475 |
| 25 | SMSM | 2016 | 593152000 | 453981000 | 0,7653704 |
|  |  | 2017 | 593152000 | 450236000 | 0,7590567 |
|  |  | 2018 | 593152000 | 450235400 | 0,7590557 |
| 26 | SMRA | 2016 | 1967204800 | 1119140440 | 0,5688988 |
|  |  | 2017 | 1967204800 | 1119140440 | 0,5688988 |
|  |  | 2018 | 3213101173 | 2004642366 | 0,6238964 |
| 27 | TBLA | 2016 | 1298668800 | 883407100 | 0,6802405 |
|  |  | 2017 | 1439668860 | 883407100 | 0,6136183 |
|  |  | 2018 | 1439668860 | 1006845804 | 0,6993593 |
| 28 | TCID | 2016 | 180000000 | 116318000 | 0,6462111 |
|  |  | 2017 | 180000000 | 116318000 | 0,6462111 |
|  |  | 2018 | 900000000 | 629166945 | 0,6990744 |
| 29 | TGKA | 2016 | 1615387200 | 1263418668 | 0,7821151 |
|  |  | 2017 | 4124206046 | 2456991594 | 0,5957490 |
|  |  | 2018 | 4163178493 | 2387293094 | 0,5734304 |
| 30 | TOTO | 2016 | 156000000 | 123584800 | 0,7922103 |
|  |  | 2017 | 180960000 | 143867810 | 0,7950255 |
|  |  | 2018 | 180960000 | 143867810 | 0,7950255 |
| 31 | TOTL | 2016 | 20159999280 | 13603807173 | 0,6747920 |
|  |  | 2017 | 20159999280 | 13564664549 | 0,6728504 |
|  |  | 2018 | 20159999280 | 13745540177 | 0,6818225 |
| 32 | TRIS | 2016 | 450000000 | 298481800 | 0,6632929 |
|  |  | 2017 | 450000000 | 308536800 | 0,6856373 |
|  |  | 2018 | 4500000000 | 3191341750 | 0,7091871 |
| 33 | TURI | 2016 | 1395000000 | 1197594500 | 0,8584907 |
|  |  | 2017 | 1395000000 | 1197594500 | 0,5849070 |
|  |  | 2018 | 1395000000 | 1197594500 | 0,8584907 |
| 34 | UNTR | 2016 | 2851609100 | 1657743325 | 0,5813361 |
|  |  | 2017 | 2851609100 | 1666872825 | 0,5845376 |
|  |  | 2018 | 2851609100 | 1666872825 | 0,5845376 |
| 35 | UNVR | 2016 | 7630000000 | 6484877500 | 0,8499184 |
|  |  | 2017 | 7630000000 | 6484877500 | 0,8499184 |
|  |  | 2018 | 7630000000 | 6484877500 | 0,8499184 |

Attachment 5

Data of Return on Assets

**Profitability Calculation (*Return on Assets -* PROF)**

Formula : 

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Company Code** | **Year** | **Net Profit after Tax** | **Total Asset** | ***Return on Asset***  **(PROF)** |
| 1 | AALI | 2016 | 790410 | 2622642 | 0,3013793 |
|  |  | 2017 | 787318 | 2748567 | 0,2864467 |
|  |  | 2018 | 1973428 | 4060602 | 0,4859939 |
| 2 | ADHI | 2016 | 119289 | 974375 | 0,1224262 |
|  |  | 2017 | 128084 | 1039093 | 0,1232652 |
|  |  | 2018 | 191208 | 1277619 | 0,1496596 |
| 3 | AKRA | 2016 | 841936 | 3029643 | 0,2778994 |
|  |  | 2017 | 1552777 | 4281602 | 0,3626626 |
|  |  | 2018 | 5132460 | 8763579 | 0,5856580 |
| 4 | ANTM | 2016 | 5457285 | 20424345 | 0,2671951 |
|  |  | 2017 | 3712097 | 22375766 | 0,1658981 |
|  |  | 2018 | 6519273 | 26962594 | 0,2417895 |
| 5 | ASGR | 2016 | 279027 | 1636389 | 0,1705139 |
|  |  | 2017 | 282058 | 1864461 | 0,1512813 |
|  |  | 2018 | 454907 | 2261414 | 0,2011604 |
| 6 | ASII | 2016 | 25086 | 176296 | 0,1422948 |
|  |  | 2017 | 20161 | 190087 | 0,1060620 |
|  |  | 2018 | 34578 | 207700 | 0,1664805 |
| 7 | ASSA | 2016 | 645186 | 2008385 | 0,3212462 |
|  |  | 2017 | 1205280 | 3131160 | 0,3849308 |
|  |  | 2018 | 758982 | 3315582 | 0,2289137 |
| 8 | AUTO | 2016 | 119496 | 822095 | 0,1453555 |
|  |  | 2017 | 18314 | 833625 | 0,0219691 |
|  |  | 2018 | 39148712 | 894005659 | 0,0437902 |
| 9 | BATA | 2016 | 3564 | 78285 | 0,0455260 |
|  |  | 2017 | 7059 | 84008 | 0,0840277 |
|  |  | 2018 | 15796 | 94001 | 0,1680408 |
| 10 | BEST | 2016 | 5202 | 54805 | 0,0949183 |
|  |  | 2017 | 5764 | 57875 | 0,0995940 |
|  |  | 2018 | 4233 | 60841 | 0,0695748 |
| 11 | CSAP | 2016 | 1889646 | 13111455 | 0,1441218 |
|  |  | 2017 | 1007822 | 13157233 | 0,0765983 |
|  |  | 2018 | 1443585 | 14119796 | 0,1022384 |
| 12 | DKFT | 2016 | 2383066 | 4575555 | 0,5208256 |
|  |  | 2017 | 3530490 | 5693940 | 0,6200434 |
|  |  | 2018 | 3624018 | 8063542 | 0,4494325 |
| 13 | DVLA | 2016 | 124018 | 4308449 | 0,0287848 |
|  |  | 2017 | 661210 | 5034463 | 0,1313367 |
|  |  | 2018 | 980357 | 7126596 | 0,1375632 |
| 14 | HMSP | 2016 | 20404 | 2316481 | 0,0088082 |
|  |  | 2017 | 18076 | 2132136 | 0,0084779 |
|  |  | 2018 | 21763 | 2238698 | 0,0097213 |
| 15 | INAI | 2016 | 52827 | 844220 | 0,0625749 |
|  |  | 2017 | 43990 | 870654 | 0,0505252 |
|  |  | 2018 | 52189 | 908028 | 0,0574751 |
| 16 | INDS | 2016 | 19023 | 134332 | 0,1416118 |
|  |  | 2017 | 20642 | 149773 | 0,1378219 |
|  |  | 2018 | 25298 | 169870 | 0,1489256 |
| 17 | ITMG | 2016 | 4107 | 21203 | 0,1936990 |
|  |  | 2017 | 2667 | 23487 | 0,1135522 |
|  |  | 2018 | 5942206112 | 29141114218 | 0,2039114 |
| 18 | KAEF | 2016 | 52425 | 496240 | 0,1056444 |
|  |  | 2017 | 29677 | 506603 | 0,0585804 |
|  |  | 2018 | 71670 | 596140 | 0,1202234 |
| 19 | MLBI | 2016 | 10301 | 110178 | 0,0934942 |
|  |  | 2017 | 9748 | 118177 | 0,0824864 |
|  |  | 2018 | 24638 | 142370 | 0,1730561 |
| 20 | MNCN | 2016 | 467060 | 2052660 | 0,2275389 |
|  |  | 2017 | 485670 | 2295460 | 0,2115785 |
|  |  | 2018 | 760207 | 2799118 | 0,2715881 |
| 21 | MTDL | 2016 | 83617 | 654524 | 0,1277524 |
|  |  | 2017 | 58103 | 675738 | 0,0859845 |
|  |  | 2018 | 66847 | 719715 | 0,0928798 |
| 22 | SCMA | 2016 | 302352 | 1762809 | 0,1715172 |
|  |  | 2017 | 312552 | 1945598 | 0,1606457 |
|  |  | 2018 | 366809 | 2153980 | 0,1702936 |
| 23 | SDMU | 2016 | 54102 | 642929 | 0,0841493 |
|  |  | 2017 | 15496 | 570925 | 0,0271419 |
|  |  | 2018 | 28244 | 611392 | 0,0461962 |
| 24 | SMGR | 2016 | 342731 | 1512164 | 0,2266494 |
|  |  | 2017 | 60004 | 1438685 | 0,0417075 |
|  |  | 2018 | 135633 | 1684095 | 0,0805376 |
| 25 | SMSM | 2016 | 1001772 | 4466931 | 0,2242640 |
|  |  | 2017 | 1295521 | 5499614 | 0,2355658 |
|  |  | 2018 | 1775408 | 6627262 | 0,2678946 |
| 26 | SMRA | 2016 | 151210 | 837150 | 0,1806247 |
|  |  | 2017 | 168099 | 975742 | 0,1722781 |
|  |  | 2018 | 159839096 | 1505261604 | 0,1061869 |
| 27 | TBLA | 2016 | 65737 | 410835 | 0,1600083 |
|  |  | 2017 | 66175 | 451062 | 0,1467093 |
|  |  | 2018 | 80325 | 482204 | 0,1665789 |
| 28 | TCID | 2016 | 35582 | 340598 | 0,1044692 |
|  |  | 2017 | 27784 | 357582 | 0,0776997 |
|  |  | 2018 | 94185 | 441320 | 0,2134166 |
| 29 | TGKA | 2016 | 6219 | 511960 | 0,0121474 |
|  |  | 2017 | 52884 | 864441 | 0,0611771 |
|  |  | 2018 | 97227 | 934960 | 0,1039905 |
| 30 | TOTO | 2016 | 92865 | 459394 | 0,2021467 |
|  |  | 2017 | 100118 | 607648 | 0,1647632 |
|  |  | 2018 | 111232 | 673640 | 0,1651208 |
| 31 | TOTL | 2016 | 7993566 | 23292401 | 0,3431834 |
|  |  | 2017 | 11005577 | 28068689 | 0,3920944 |
|  |  | 2018 | 12857018 | 33748579 | 0,3809647 |
| 32 | TRIS | 2016 | 296825 | 1793257 | 0,1655228 |
|  |  | 2017 | 272584 | 1942441 | 0,1403306 |
|  |  | 2018 | 278358 | 2115644 | 0,1315713 |
| 33 | TURI | 2016 | 142732 | 678147 | 0,2104735 |
|  |  | 2017 | 22211 | 673853 | 0,0329612 |
|  |  | 2018 | 189816 | 856276 | 0,2216762 |
| 34 | UNTR | 2016 | 1050729 | 4105713 | 0,2559188 |
|  |  | 2017 | 930372 | 4594437 | 0,2024997 |
|  |  | 2018 | 1493037 | 5733335 | 0,2604134 |
| 35 | UNVR | 2016 | 1440485 | 2173526 | 0,6627411 |
|  |  | 2017 | 1721595 | 2368527 | 0,7268632 |
|  |  | 2018 | 1962147 | 2692141 | 0,7288426 |

Attachment 6

Data of Firm’ Value

**The Calculation of the Firm’s Value (*Price to Book Value***- **NP)**

Formula : 

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Company Code** | **Year** | ***Market Price per Share*** | ***Book Value per Share*** | ***Price Book Value (NP)*** |
| 1 | AALI | 2016 | 1920 | 355 | 5,4084507 |
|  |  | 2017 | 2000 | 449 | 4,4543430 |
|  |  | 2018 | 1375 | 501 | 2,7445110 |
| 2 | ADHI | 2016 | 910 | 1909 | 0,4766894 |
|  |  | 2017 | 600 | 2134 | 0,2811621 |
|  |  | 2018 | 268 | 1041 | 0,2574448 |
| 3 | AKRA | 2016 | 8300 | 5661 | 1,4661721 |
|  |  | 2017 | 7000 | 6361 | 1,1004559 |
|  |  | 2018 | 8050 | 7338 | 1,0970292 |
| 4 | ANTM | 2016 | 86 | 146 | 0,5890411 |
|  |  | 2017 | 65 | 427 | 0,1522248 |
|  |  | 2018 | 81 | 150 | 0,5400000 |
| 5 | ASGR | 2016 | 3700 | 1423 | 2,6001405 |
|  |  | 2017 | 3650 | 1956 | 1,8660532 |
|  |  | 2018 | 4200 | 2103 | 1,9971469 |
| 6 | ASII | 2016 | 3000 | 3645 | 0,8230453 |
|  |  | 2017 | 2250 | 4441 | 0,5066426 |
|  |  | 2018 | 5000 | 4937 | 1,0127608 |
| 7 | ASSA | 2016 | 700 | 437 | 1,6018307 |
|  |  | 2017 | 455 | 443 | 1,0270880 |
|  |  | 2018 | 705 | 531 | 1,3276836 |
| 8 | AUTO | 2016 | 700 | 629 | 1,1128776 |
|  |  | 2017 | 550 | 771 | 0,7133593 |
|  |  | 2018 | 540 | 815 | 0,6625767 |
| 9 | BATA | 2016 | 114 | 208 | 0,5480769 |
|  |  | 2017 | 109 | 6582 | 0,0165603 |
|  |  | 2018 | 107 | 223 | 0,4798206 |
| 10 | BEST | 2016 | 1300 | 1558 | 0,8344031 |
|  |  | 2017 | 1160 | 1776 | 0,6531532 |
|  |  | 2018 | 1500 | 1807 | 0,8301051 |
| 11 | CSAP | 2016 | 4400 | 1724 | 2,5522042 |
|  |  | 2017 | 4500 | 2314 | 1,9446845 |
|  |  | 2018 | 5300 | 2273 | 2,3317202 |
| 12 | DKFT | 2016 | 385 | 470 | 0,8191489 |
|  |  | 2017 | 470 | 675 | 0,6962963 |
|  |  | 2018 | 353 | 713 | 0,4950912 |
| 13 | DVLA | 2016 | 1690 | 751 | 2,2503329 |
|  |  | 2017 | 2200 | 817 | 2,6927785 |
|  |  | 2018 | 1690 | 859 | 1,9674040 |
| 14 | HMSP | 2016 | 56300 | 13828 | 4,0714492 |
|  |  | 2017 | 42000 | 15288 | 2,7472527 |
|  |  | 2018 | 60700 | 17270 | 3,5147655 |
| 15 | INAI | 2016 | 450 | 816 | 1,4153944 |
|  |  | 2017 | 600 | 797 | 1,0281518 |
|  |  | 2018 | 350 | 460 | 0,8299359 |
| 16 | INDS | 2016 | 2225 | 1572 | 3,4046693 |
|  |  | 2017 | 1680 | 1634 | 4,4835165 |
|  |  | 2018 | 1425 | 1717 | 5,0794882 |
| 17 | ITMG | 2016 | 7000 | 2056 | 1,6233766 |
|  |  | 2017 | 10200 | 2275 | #REF! |
|  |  | 2018 | 13100 | 2579 | #REF! |
| 18 | KAEF | 2016 | 375 | 231 | #REF! |
|  |  | 2017 | 600 | 797 | 0,7528231 |
|  |  | 2018 | 315 | 271 | 1,1623616 |
| 19 | MLBI | 2016 | 245 | 639 | 0,3834116 |
|  |  | 2017 | 240 | 697 | 0,3443329 |
|  |  | 2018 | 238 | 757 | 0,3143989 |
| 20 | MNCN | 2016 | 5850 | 3888 | 1,5046296 |
|  |  | 2017 | 1000 | 5584 | 0,1790831 |
|  |  | 2018 | 6750 | 4695 | 1,4376997 |
| 21 | MTDL | 2016 | 1420 | 4379 | 0,3242749 |
|  |  | 2017 | 1400 | 5145 | 0,2721088 |
|  |  | 2018 | 1045 | 5474 | 0,1909024 |
| 22 | SCMA | 2016 | 22450 | 5275 | 4,2559242 |
|  |  | 2017 | 20000 | 6242 | 3,2041012 |
|  |  | 2018 | 25000 | 6733 | 3,7130551 |
| 23 | SDMU | 2016 | 1900 | 945 | 2,0105820 |
|  |  | 2017 | 2850 | 977 | 2,9170931 |
|  |  | 2018 | 2350 | 1133 | 2,0741395 |
| 24 | SMGR | 2016 | 15850 | 3062 | 5,1763553 |
|  |  | 2017 | 14150 | 3676 | 3,8492927 |
|  |  | 2018 | 16200 | 4215 | 3,8434164 |
| 25 | SMSM | 2016 | 2525 | 570 | 4,4298246 |
|  |  | 2017 | 3450 | 706 | 4,8866856 |
|  |  | 2018 | 4750 | 797 | 5,9598494 |
| 26 | SMRA | 2016 | 180 | 187 | 0,9625668 |
|  |  | 2017 | 180 | 202 | 0,8910891 |
|  |  | 2018 | 300 | 222 | 1,3513514 |
| 27 | TBLA | 2016 | 345 | 482 | 0,7157676 |
|  |  | 2017 | 250 | 609 | 0,4105090 |
|  |  | 2018 | 120 | 190 | 0,6315789 |
| 28 | TCID | 2016 | 11000 | 5455 | 2,0164986 |
|  |  | 2017 | 11900 | 7291 | 1,6321492 |
|  |  | 2018 | 17525 | 9217 | 1,9013779 |
| 29 | TGKA | 2016 | 3725 | 745 | 5,0000000 |
|  |  | 2017 | 3250 | 858 | 3,7878788 |
|  |  | 2018 | 3950 | 618 | 6,3915858 |
| 30 | TOTO | 2016 | 6650 | 1813 | 3,6679537 |
|  |  | 2017 | 7700 | 2091 | 3,6824486 |
|  |  | 2018 | 3975 | 1243 | 3,1979083 |
| 31 | TOTL | 2016 | 4050 | 3181 | 1,2731845 |
|  |  | 2017 | 3250 | 858 | 3,7878788 |
|  |  | 2018 | 2865 | 918 | 3,1209150 |
| 32 | TRIS | 2016 | 340 | 243 | 1,3991770 |
|  |  | 2017 | 400 | 302 | 1,3245033 |
|  |  | 2018 | 356 | 297 | 1,1986532 |
| 33 | TURI | 2016 | 1330 | 580 | 2,2931034 |
|  |  | 2017 | 4500 | 698 | 6,4469914 |
|  |  | 2018 | 3720 | 784 | 4,7448980 |
| 34 | UNTR | 2016 | 345 | 3188 | 0,1082183 |
|  |  | 2017 | 250 | 3199 | 0,0781494 |
|  |  | 2018 | 318 | 3204 | 0,0992509 |
| 35 | UNVR | 2016 | 760 | 313 | 2,4281150 |
|  |  | 2017 | 670 | 372 | 1,8010753 |
|  |  | 2018 | 625 | 407 | 1,5356265 |

Attachment 7

Descriptive Statistical Variables

**Descriptive Analysis Output**

**Descriptive Statistics**

**Descriptive Statistics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | N | Minimum | Maximum | Mean | Std. Deviation |
| INSDR | 105 | ,0000001 | ,2561979 | ,027842670 | ,0597573729 |
| INST | 105 | ,5005000 | ,9794816 | ,707273022 | ,1266602982 |
| PROF | 105 | ,0084779 | ,7288426 | ,187092829 | ,1489899714 |
| DPR | 105 | ,0180000 | ,8000000 | ,333151107 | ,1678730029 |
| NP | 105 | ,0165603 | 6,4469914 | 1,995679998 | 1,6271686426 |
| Valid N (listwise) | 105 |  |  |  |  |

**Classical Assumption Test Model I Output**

1. **The Normality Test**

**One-Sample Kolmogorov-Smirnov Test**

|  |  |  |
| --- | --- | --- |
|  | | Unstandardized Residual |
| N | | 105 |
| Normal Parameters(a,b) | Mean | ,0000000 |
| Std. Deviation | ,15858985 |
| Most Extreme Differences | Absolute | ,054 |
| Positive | ,048 |
| Negative | -,054 |
| Kolmogorov-Smirnov Z | | ,555 |
| Asymp. Sig. (2-tailed) | | ,918 |

a Test distribution is Normal.

b Calculated from data.

1. **The Heteroscedasticity Test**

**Coefficients(a)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model |  | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | ,020 | ,052 |  | ,379 | ,705 |
| INSDR | -,182 | ,154 | -,117 | -1,187 | ,238 |
| INST | ,175 | ,073 | ,238 | 2,390 | ,079 |
| PROF | -,057 | ,063 | -,092 | -,914 | ,363 |

a Dependent Variable: Abs\_ut

1. **The Multi-linearity Test**

**Coefficients(a)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model |  | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|  |  | B | Std. Error | Beta |  |  | Tolerance | VIF |
| 1 | (Constant) | ,108 | ,092 |  | 1,171 | ,244 |  |  |
|  | INSDR | -,470 | ,272 | -,167 | -1,726 | ,087 | ,943 | 1,061 |
|  | INST | ,335 | ,130 | ,253 | 2,584 | ,071 | ,922 | 1,085 |
|  | PROF | ,004 | ,111 | ,003 | ,036 | ,042 | ,913 | 1,096 |

a Dependent Variable: DPR

1. **The Autocorrelation Test**

**Model Summary(b)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | ,328(a) | ,108 | ,081 | ,1609279132 | 1,830 |

a Predictors: (Constant), PROF, INSDR, INST

b Dependent Variable: DPR

**Classical Assumption Test Model II Output**

1. **The Normality Test**

**One-Sample Kolmogorov-Smirnov Test**

|  |  |  |
| --- | --- | --- |
|  | | Unstandardized Residual |
| N | | 105 |
| Normal Parameters(a,b) | Mean | ,0000000 |
| Std. Deviation | 1,54449760 |
| Most Extreme Differences | Absolute | ,127 |
| Positive | ,127 |
| Negative | -,057 |
| Kolmogorov-Smirnov Z | | 1,279 |
| Asymp. Sig. (2-tailed) | | ,076 |

a Test distribution is Normal.

b Calculated from data.

1. **The Heteroscedasticity Test**

**Coefficients(a)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model |  | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 2,286 | ,524 |  | 4,363 | ,000 |
| INSDR | -4,972 | 1,833 | -,278 | -2,713 | ,088 |
| INST | -1,249 | ,745 | -,176 | -1,676 | ,097 |
| PROF | -,808 | ,613 | -,134 | -1,318 | ,191 |
| DPR | ,299 | ,554 | ,055 | ,540 | ,590 |

a Dependent Variable: Abs\_ut2

1. **The Multi-linearity Test**

**Coefficients(a)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model |  | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|  |  | B | Std. Error | Beta |  |  | Tolerance | VIF |
| 1 | (Constant) | 2,372 | ,931 |  | 2,546 | ,012 |  |  |
|  | INSDR | -5,411 | 3,258 | -,170 | -1,661 | ,021 | ,895 | 1,118 |
|  | INST | -1,268 | 1,325 | -,100 | -,957 | ,341 | ,853 | 1,173 |
|  | PROF | ,901 | 1,090 | ,084 | ,826 | ,041 | ,911 | 1,098 |
|  | DPR | 2,415 | ,985 | ,251 | 2,453 | ,016 | ,897 | 1,114 |

a Dependent Variable: NP

1. **The Autocorrelation Test**

**Model Summary(b)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | ,807(a) | ,651 | ,612 | 6,2042762656 | 1,873 |

a Predictors: (Constant), DPR, PROF, INSDR, INST

b Dependent Variable: NP

SPSS Output **(Model 1 Regression)**

**Model Summary**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | ,328(a) | ,108 | ,081 | ,1609279132 |

a Predictors: (Constant), PROF, INSDR, INST

**ANOVA(b)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | ,315 | 3 | ,105 | 4,057 | ,009(a) |
| Residual | 2,616 | 101 | ,026 |  |  |
| Total | 2,931 | 104 |  |  |  |

a Predictors: (Constant), PROF, INSDR, INST

b Dependent Variable: DPR

**Coefficients(a)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model |  | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | ,108 | ,092 |  | 1,171 | ,244 |
| INSDR | -,470 | ,272 | -,167 | -1,726 | ,087 |
| INST | ,335 | ,130 | ,253 | 2,584 | ,071 |
| PROF | ,004 | ,111 | ,003 | ,036 | ,042 |

a Dependent Variable: DPR

SPSS Output **(Model 2 Regression)**

**Model Summary**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | R | R Square | Adjusted R Square | Std. Error of  the Estimate |
| 1 | ,807(a) | ,651 | ,612 | 6,2042762656 |

a Predictors: (Constant), DPR, PROF, INSDR, INST

**ANOVA(b)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 26,220 | 4 | 6,555 | 2,638 | ,039(a) |
| Residual | 238,547 | 96 | 2,485 |  |  |
| Total | 264,768 | 100 |  |  |  |

a Predictors: (Constant), DPR, PROF, INSDR, INST

b Dependent Variable: NP

**Coefficients(a)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model |  | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 2,372 | ,931 |  | 2,546 | ,012 |
| INSDR | -5,411 | 3,258 | -,170 | -1,661 | ,021 |
| INST | -1,268 | 1,325 | -,100 | -,957 | ,341 |
| PROF | ,901 | 1,090 | ,084 | ,826 | ,041 |
| DPR | 2,415 | ,985 | ,251 | 2,453 | ,016 |

a Dependent Variable: NP