

Tables with Critical Values for  
**Integrated Modified OLS Estimation and Fixed-b  
Inference for Cointegrating Regressions**

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# 1 Bartlett Kernel (Intercept Only)

## 1.1 t-Test

|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 95%   | 1.6932  | 1.8255  | 1.9707  | 2.1396  | 2.3210  | 2.5175  | 2.7227  | 2.9298  | 3.1351  | 3.3396  |
| 97.5% | 2.0285  | 2.2063  | 2.3979  | 2.6170  | 2.8474  | 3.0972  | 3.3545  | 3.6098  | 3.8663  | 4.1107  |
| 99%   | 2.4460  | 2.6685  | 2.9201  | 3.1932  | 3.4966  | 3.8131  | 4.1413  | 4.4832  | 4.8197  | 5.1422  |
| 99.5% | 2.7455  | 2.9923  | 3.2870  | 3.6355  | 3.9600  | 4.3330  | 4.7332  | 5.1388  | 5.4687  | 5.8420  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 3.5348  | 3.7171  | 3.8848  | 4.0360  | 4.1949  | 4.3322  | 4.4521  | 4.5517  | 4.6500  | 4.7492  |
| 97.5% | 4.3616  | 4.5772  | 4.7941  | 4.9891  | 5.1695  | 5.3217  | 5.4714  | 5.6035  | 5.7264  | 5.8454  |
| 99%   | 5.4265  | 5.6797  | 5.9238  | 6.1835  | 6.4076  | 6.6029  | 6.7954  | 6.9543  | 7.1223  | 7.2694  |
| 99.5% | 6.1353  | 6.4441  | 6.7049  | 6.9934  | 7.3124  | 7.5098  | 7.6841  | 7.9199  | 8.0373  | 8.1602  |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 4.8455  | 4.9227  | 4.9890  | 5.0645  | 5.1309  | 5.2114  | 5.2894  | 5.3637  | 5.4394  | 5.5033  |
| 97.5% | 5.9590  | 6.0499  | 6.1588  | 6.2430  | 6.3396  | 6.4336  | 6.5389  | 6.6441  | 6.7322  | 6.8134  |
| 99%   | 7.3677  | 7.5084  | 7.5941  | 7.7294  | 7.8500  | 8.0009  | 8.1297  | 8.2313  | 8.3557  | 8.5135  |
| 99.5% | 8.3116  | 8.4798  | 8.6175  | 8.7959  | 8.9384  | 9.1105  | 9.2329  | 9.4176  | 9.5586  | 9.7002  |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 5.5858  | 5.6636  | 5.7333  | 5.7873  | 5.8568  | 5.9161  | 5.9785  | 6.0525  | 6.1182  | 6.1826  |
| 97.5% | 6.8984  | 7.0026  | 7.0860  | 7.1694  | 7.2608  | 7.3434  | 7.4407  | 7.5176  | 7.5911  | 7.6673  |
| 99%   | 8.6067  | 8.6957  | 8.8061  | 8.8890  | 9.0184  | 9.1032  | 9.2298  | 9.3602  | 9.4847  | 9.5579  |
| 99.5% | 9.7874  | 9.9185  | 10.0433 | 10.2004 | 10.3577 | 10.4819 | 10.5370 | 10.6463 | 10.7998 | 10.8832 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 6.2477  | 6.3023  | 6.3524  | 6.4244  | 6.4760  | 6.5296  | 6.5847  | 6.6304  | 6.6853  | 6.7365  |
| 97.5% | 7.7403  | 7.8267  | 7.8905  | 7.9613  | 8.0327  | 8.0984  | 8.1740  | 8.2414  | 8.3106  | 8.3767  |
| 99%   | 9.6555  | 9.7774  | 9.8532  | 9.9286  | 10.0028 | 10.1165 | 10.2018 | 10.2871 | 10.3599 | 10.4436 |
| 99.5% | 10.9947 | 11.1332 | 11.2467 | 11.3489 | 11.4627 | 11.5894 | 11.6811 | 11.7972 | 11.9234 | 12.0290 |

Table 1: Fixed-b critical values for t-test in regression with intercept and 1 regressors for the Bartlett kernel (Upper tail).

|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 95%   | 1.7726  | 2.0078  | 2.2875  | 2.6046  | 2.9391  | 3.2890  | 3.6264  | 3.9302  | 4.1982  | 4.4313  |
| 97.5% | 2.1203  | 2.4255  | 2.7723  | 3.1544  | 3.5606  | 3.9914  | 4.4019  | 4.7892  | 5.1189  | 5.3980  |
| 99%   | 2.5443  | 2.9135  | 3.3372  | 3.8309  | 4.3491  | 4.8689  | 5.3757  | 5.8218  | 6.2189  | 6.5369  |
| 99.5% | 2.8225  | 3.2578  | 3.7562  | 4.3027  | 4.9150  | 5.4875  | 6.0335  | 6.5333  | 6.9477  | 7.3487  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 4.6390  | 4.8106  | 4.9664  | 5.1191  | 5.2411  | 5.3542  | 5.4818  | 5.5963  | 5.7493  | 5.8764  |
| 97.5% | 5.6375  | 5.8410  | 6.0278  | 6.1788  | 6.3552  | 6.5217  | 6.6700  | 6.8309  | 7.0068  | 7.1354  |
| 99%   | 6.8352  | 7.1175  | 7.3204  | 7.5620  | 7.7610  | 7.9445  | 8.1463  | 8.3146  | 8.5490  | 8.7581  |
| 99.5% | 7.7023  | 8.0277  | 8.2890  | 8.4583  | 8.7367  | 8.9617  | 9.2166  | 9.4804  | 9.6675  | 9.8859  |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 5.9959  | 6.1140  | 6.2254  | 6.3383  | 6.4388  | 6.5404  | 6.6472  | 6.7381  | 6.8285  | 6.9217  |
| 97.5% | 7.2820  | 7.4378  | 7.5721  | 7.7328  | 7.8749  | 7.9945  | 8.1150  | 8.2389  | 8.3546  | 8.4912  |
| 99%   | 8.9313  | 9.1146  | 9.3144  | 9.5277  | 9.7006  | 9.8397  | 9.9758  | 10.1568 | 10.3177 | 10.4749 |
| 99.5% | 10.0106 | 10.2779 | 10.5112 | 10.7147 | 10.8197 | 11.0489 | 11.3112 | 11.4307 | 11.6209 | 11.7621 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 7.0177  | 7.1042  | 7.1870  | 7.2764  | 7.3487  | 7.4392  | 7.5114  | 7.5818  | 7.6713  | 7.7406  |
| 97.5% | 8.6108  | 8.7007  | 8.8101  | 8.9008  | 9.0006  | 9.1148  | 9.2016  | 9.3062  | 9.4379  | 9.5379  |
| 99%   | 10.5860 | 10.7557 | 10.9126 | 11.0272 | 11.1625 | 11.2902 | 11.4096 | 11.5244 | 11.6837 | 11.7959 |
| 99.5% | 11.9458 | 12.1328 | 12.3019 | 12.4964 | 12.5946 | 12.7323 | 12.8848 | 13.0816 | 13.1807 | 13.3447 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 7.8130  | 7.8851  | 7.9575  | 8.0205  | 8.0828  | 8.1659  | 8.2320  | 8.2987  | 8.3585  | 8.4269  |
| 97.5% | 9.6329  | 9.7187  | 9.8127  | 9.9022  | 9.9841  | 10.0917 | 10.1651 | 10.2582 | 10.3399 | 10.4298 |
| 99%   | 11.9049 | 12.0356 | 12.1098 | 12.2529 | 12.3893 | 12.4939 | 12.5887 | 12.6809 | 12.8104 | 12.9237 |
| 99.5% | 13.5002 | 13.6335 | 13.7487 | 13.8850 | 14.0385 | 14.1956 | 14.2678 | 14.4029 | 14.5514 | 14.6775 |

Table 2: Fixed-b critical values for t-test in regression with intercept and 2 regressors for the Bartlett kernel (Upper tail).

|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 95%   | 1.8454  | 2.2009  | 2.6204  | 3.0801  | 3.5541  | 4.0041  | 4.3754  | 4.6973  | 4.9320  | 5.1238  |
| 97.5% | 2.2116  | 2.6505  | 3.1772  | 3.7490  | 4.3302  | 4.8314  | 5.2891  | 5.6538  | 5.9637  | 6.2151  |
| 99%   | 2.6190  | 3.1721  | 3.8203  | 4.5413  | 5.2281  | 5.8390  | 6.3675  | 6.7678  | 7.1386  | 7.4552  |
| 99.5% | 2.9129  | 3.5588  | 4.3135  | 5.0944  | 5.8468  | 6.5397  | 7.1287  | 7.6322  | 8.0216  | 8.3808  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 5.3107  | 5.4977  | 5.6774  | 5.8501  | 6.0281  | 6.2024  | 6.3629  | 6.5177  | 6.6790  | 6.8294  |
| 97.5% | 6.4413  | 6.6844  | 6.8886  | 7.0976  | 7.3165  | 7.5336  | 7.7273  | 7.9419  | 8.1370  | 8.3364  |
| 99%   | 7.7317  | 8.0148  | 8.2819  | 8.5842  | 8.8267  | 9.0788  | 9.2823  | 9.5853  | 9.8328  | 10.0726 |
| 99.5% | 8.6845  | 8.9857  | 9.2760  | 9.6329  | 9.8962  | 10.2099 | 10.4931 | 10.7804 | 11.0272 | 11.2863 |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 6.9606  | 7.1086  | 7.2427  | 7.3612  | 7.4946  | 7.6140  | 7.7362  | 7.8290  | 7.9529  | 8.0641  |
| 97.5% | 8.4989  | 8.6376  | 8.8291  | 9.0000  | 9.1515  | 9.2953  | 9.4428  | 9.5995  | 9.7391  | 9.8671  |
| 99%   | 10.2567 | 10.4499 | 10.6604 | 10.8786 | 11.0499 | 11.2009 | 11.4147 | 11.6036 | 11.8006 | 11.9767 |
| 99.5% | 11.5127 | 11.7598 | 11.9907 | 12.2653 | 12.4450 | 12.6541 | 12.8534 | 13.0166 | 13.2281 | 13.4195 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 8.1628  | 8.2726  | 8.3728  | 8.4600  | 8.5644  | 8.6726  | 8.7867  | 8.8715  | 8.9446  | 9.0375  |
| 97.5% | 9.9912  | 10.1258 | 10.2470 | 10.3906 | 10.4954 | 10.6389 | 10.7488 | 10.8721 | 10.9872 | 11.0529 |
| 99%   | 12.1077 | 12.3172 | 12.4537 | 12.6216 | 12.7490 | 12.8933 | 13.0545 | 13.2490 | 13.3720 | 13.5200 |
| 99.5% | 13.6202 | 13.8167 | 14.0299 | 14.1697 | 14.4125 | 14.5270 | 14.6320 | 14.8300 | 15.0483 | 15.1656 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 9.1276  | 9.2142  | 9.2851  | 9.3636  | 9.4597  | 9.5362  | 9.6170  | 9.6940  | 9.7748  | 9.8462  |
| 97.5% | 11.1878 | 11.3177 | 11.4193 | 11.5132 | 11.6266 | 11.7381 | 11.8250 | 11.9031 | 12.0067 | 12.1055 |
| 99%   | 13.6295 | 13.7580 | 13.9172 | 14.0591 | 14.2028 | 14.3135 | 14.4458 | 14.5619 | 14.7032 | 14.8181 |
| 99.5% | 15.3626 | 15.4945 | 15.5843 | 15.8079 | 15.9424 | 16.0954 | 16.2370 | 16.4152 | 16.5341 | 16.6786 |

Table 3: Fixed-b critical values for t-test in regression with intercept and 3 regressors for the Bartlett kernel (Upper tail).

|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 95%   | 1.9219  | 2.4089  | 2.9883  | 3.5983  | 4.1505  | 4.5780  | 4.9152  | 5.1837  | 5.4236  | 5.6561  |
| 97.5% | 2.3103  | 2.9064  | 3.6115  | 4.3408  | 4.9815  | 5.5293  | 5.9226  | 6.2596  | 6.5674  | 6.8503  |
| 99%   | 2.7382  | 3.4699  | 4.3355  | 5.2241  | 5.9953  | 6.5989  | 7.1560  | 7.5030  | 7.8697  | 8.1941  |
| 99.5% | 3.0362  | 3.8671  | 4.8663  | 5.8320  | 6.6954  | 7.3789  | 7.9440  | 8.3855  | 8.7802  | 9.1606  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 5.8764  | 6.1237  | 6.3363  | 6.5433  | 6.7559  | 6.9304  | 7.1169  | 7.2897  | 7.4491  | 7.6239  |
| 97.5% | 7.1061  | 7.4049  | 7.6497  | 7.9279  | 8.1899  | 8.4128  | 8.6420  | 8.8645  | 9.0762  | 9.2609  |
| 99%   | 8.5828  | 8.9150  | 9.2278  | 9.5798  | 9.8916  | 10.1556 | 10.4917 | 10.6963 | 10.9663 | 11.1951 |
| 99.5% | 9.5846  | 9.9395  | 10.3014 | 10.6710 | 11.0225 | 11.3388 | 11.6678 | 11.9158 | 12.2776 | 12.5697 |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 7.7720  | 7.9210  | 8.0734  | 8.2160  | 8.3584  | 8.4830  | 8.5984  | 8.7456  | 8.8575  | 8.9849  |
| 97.5% | 9.4862  | 9.6437  | 9.8568  | 10.0102 | 10.1872 | 10.3533 | 10.5266 | 10.6590 | 10.8541 | 11.0020 |
| 99%   | 11.4212 | 11.6707 | 11.8695 | 12.1236 | 12.3036 | 12.5319 | 12.7340 | 12.9611 | 13.1479 | 13.3569 |
| 99.5% | 12.7500 | 13.0271 | 13.3221 | 13.5559 | 13.8234 | 14.0661 | 14.3277 | 14.4925 | 14.7939 | 14.9191 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 9.0866  | 9.2028  | 9.3083  | 9.4487  | 9.5482  | 9.6483  | 9.7415  | 9.8651  | 9.9703  | 10.0508 |
| 97.5% | 11.1519 | 11.2780 | 11.4545 | 11.6075 | 11.7632 | 11.8760 | 12.0086 | 12.1432 | 12.2770 | 12.3951 |
| 99%   | 13.5693 | 13.7390 | 13.8576 | 14.0315 | 14.2509 | 14.4449 | 14.5775 | 14.7391 | 14.8991 | 15.1063 |
| 99.5% | 15.1544 | 15.4189 | 15.6300 | 15.7517 | 15.9091 | 16.2694 | 16.3475 | 16.5214 | 16.7036 | 16.9206 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 10.1549 | 10.2459 | 10.3630 | 10.4447 | 10.5275 | 10.6262 | 10.7182 | 10.8016 | 10.8788 | 10.9680 |
| 97.5% | 12.5186 | 12.6468 | 12.7690 | 12.8927 | 12.9897 | 13.1335 | 13.2538 | 13.3620 | 13.4764 | 13.5875 |
| 99%   | 15.2303 | 15.3828 | 15.5397 | 15.6970 | 15.8287 | 15.9967 | 16.1204 | 16.2732 | 16.4055 | 16.5527 |
| 99.5% | 17.1673 | 17.2937 | 17.4538 | 17.6079 | 17.7925 | 17.9492 | 18.1365 | 18.2728 | 18.4809 | 18.6169 |

Table 4: Fixed-b critical values for t-test in regression with intercept and 4 regressors for the Bartlett kernel (Upper tail).

## 1.2 Wald Test

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 2.8740   | 3.3425   | 3.9210   | 4.6007   | 5.4190   | 6.3812   | 7.4610   | 8.6085   | 9.8552   | 11.1793  |
| 95%   | 4.1203   | 4.8507   | 5.7208   | 6.7736   | 8.0306   | 9.4886   | 11.1169  | 12.8937  | 14.8433  | 16.8498  |
| 97.5% | 5.4429   | 6.3849   | 7.6197   | 9.1409   | 10.8570  | 12.8678  | 15.3071  | 17.8722  | 20.5134  | 23.2172  |
| 99%   | 7.2863   | 8.6852   | 10.4294  | 12.6398  | 15.1700  | 18.1348  | 21.4299  | 25.0463  | 28.7213  | 32.6323  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 12.4875  | 13.7890  | 15.0676  | 16.3655  | 17.5829  | 18.6842  | 19.7298  | 20.7332  | 21.6163  | 22.4428  |
| 95%   | 18.8554  | 20.7861  | 22.6984  | 24.6639  | 26.4178  | 28.0650  | 29.7273  | 31.0111  | 32.4335  | 33.7746  |
| 97.5% | 25.9049  | 28.5817  | 31.1898  | 33.8694  | 36.2064  | 38.2703  | 40.6242  | 42.7379  | 44.4190  | 46.3023  |
| 99%   | 36.3056  | 39.9980  | 43.4741  | 47.0362  | 50.7323  | 53.6194  | 56.1862  | 58.9681  | 61.3545  | 63.9313  |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 23.2711  | 24.0756  | 24.8873  | 25.6469  | 26.3736  | 27.0953  | 27.8897  | 28.6679  | 29.4188  | 30.1744  |
| 95%   | 35.0181  | 36.1786  | 37.3138  | 38.4392  | 39.7771  | 40.8503  | 42.1404  | 43.3255  | 44.6411  | 45.8796  |
| 97.5% | 48.0860  | 49.9113  | 51.4254  | 53.1289  | 55.0118  | 56.8667  | 58.3379  | 59.7807  | 61.4787  | 63.0870  |
| 99%   | 67.1013  | 69.6359  | 71.3312  | 73.5077  | 76.9098  | 79.5173  | 81.9022  | 84.1444  | 87.0292  | 89.4274  |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 31.0536  | 31.9139  | 32.7201  | 33.4921  | 34.2370  | 35.0304  | 35.8476  | 36.6666  | 37.3417  | 38.1392  |
| 95%   | 47.0462  | 48.2067  | 49.3095  | 50.5813  | 51.8578  | 53.0629  | 54.3119  | 55.5417  | 56.7947  | 57.8106  |
| 97.5% | 65.1088  | 66.9534  | 68.5698  | 70.1471  | 71.8239  | 73.6878  | 75.7398  | 77.4403  | 79.0030  | 80.6336  |
| 99%   | 91.0579  | 93.7993  | 96.3229  | 99.3012  | 102.1202 | 104.4943 | 106.1906 | 108.8047 | 111.3041 | 113.9500 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 38.8781  | 39.5198  | 40.3108  | 40.9716  | 41.5858  | 42.2684  | 43.0289  | 43.6994  | 44.4014  | 45.0694  |
| 95%   | 58.9998  | 60.3138  | 61.2381  | 62.3955  | 63.3861  | 64.4301  | 65.5844  | 66.7380  | 67.9100  | 69.1165  |
| 97.5% | 82.1288  | 83.8734  | 85.3840  | 86.8369  | 88.5485  | 90.3416  | 92.0441  | 93.6365  | 94.9763  | 96.6399  |
| 99%   | 116.4782 | 118.3506 | 121.1454 | 123.0953 | 125.0825 | 127.6096 | 129.6992 | 132.2067 | 134.8182 | 137.6432 |

Table 5: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 1 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 3.1233   | 4.0219   | 5.2243   | 6.7177   | 8.5532   | 10.6687  | 13.0344  | 15.3078  | 17.4678  | 19.5475  |
| 95%   | 4.4658   | 5.8057   | 7.5940   | 9.8673   | 12.6166  | 15.6728  | 19.0672  | 22.4733  | 25.6631  | 28.5733  |
| 97.5% | 5.8763   | 7.7118   | 10.1363  | 13.2269  | 17.0755  | 21.3809  | 25.8735  | 30.4303  | 34.7280  | 38.8979  |
| 99%   | 7.8017   | 10.3156  | 13.7462  | 18.2132  | 23.7966  | 29.7830  | 35.9322  | 42.2325  | 47.9138  | 53.4700  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 21.5376  | 23.0961  | 24.5766  | 25.9465  | 27.3244  | 28.5908  | 29.9763  | 31.4536  | 32.9064  | 34.2634  |
| 95%   | 31.2498  | 33.8292  | 35.9865  | 38.0155  | 40.0773  | 42.2202  | 44.2796  | 46.3427  | 48.3619  | 50.4736  |
| 97.5% | 42.3650  | 45.8127  | 48.6390  | 51.4917  | 54.2582  | 56.8599  | 59.6305  | 62.5454  | 66.0050  | 68.9392  |
| 99%   | 57.6948  | 62.4490  | 67.0194  | 70.5564  | 74.6541  | 78.7165  | 83.2328  | 86.8964  | 91.1511  | 95.4949  |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 35.6967  | 37.1292  | 38.6356  | 39.9291  | 41.4483  | 42.7748  | 44.0980  | 45.4190  | 46.6154  | 47.9955  |
| 95%   | 52.3587  | 54.7824  | 57.0381  | 58.8770  | 61.0213  | 63.1352  | 65.1306  | 67.2066  | 69.1456  | 70.9950  |
| 97.5% | 71.9802  | 74.8423  | 77.6588  | 80.5549  | 83.4241  | 86.3802  | 89.0370  | 91.9917  | 94.6941  | 97.9957  |
| 99%   | 99.7715  | 104.1355 | 107.8320 | 112.5171 | 116.6246 | 120.2247 | 124.0231 | 128.9826 | 132.7543 | 135.5973 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 49.1142  | 50.3757  | 51.6883  | 52.8101  | 54.0624  | 55.2194  | 56.4992  | 57.7670  | 58.8945  | 59.9748  |
| 95%   | 72.7918  | 74.7604  | 76.9040  | 78.9122  | 80.6533  | 82.5022  | 84.1937  | 85.9437  | 87.9057  | 89.9277  |
| 97.5% | 100.2892 | 102.8967 | 105.3355 | 108.2897 | 110.8834 | 113.6081 | 116.1894 | 118.7828 | 121.6093 | 123.7003 |
| 99%   | 140.2955 | 144.4721 | 148.4005 | 152.0499 | 154.3526 | 158.7372 | 163.9965 | 167.2696 | 170.1328 | 173.6873 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 61.2449  | 62.4235  | 63.4715  | 64.5411  | 65.6124  | 66.7072  | 67.7964  | 68.9025  | 70.0301  | 71.2068  |
| 95%   | 91.4482  | 93.2496  | 95.0371  | 96.7492  | 98.3080  | 100.3166 | 102.1266 | 103.9534 | 105.6617 | 107.4313 |
| 97.5% | 126.0732 | 129.4001 | 131.7548 | 134.0350 | 136.5779 | 138.6138 | 141.4623 | 144.4005 | 146.8763 | 149.6753 |
| 99%   | 177.8994 | 182.1699 | 185.5122 | 189.5147 | 193.3516 | 196.5543 | 200.6523 | 203.0844 | 206.9676 | 210.9900 |

Table 6: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 2 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 5.3368   | 6.9040   | 9.0463   | 11.7565  | 15.0667  | 18.7904  | 22.8339  | 26.7988  | 30.6797  | 34.2399  |
| 95%   | 7.0289   | 9.2328   | 12.2127  | 15.9651  | 20.5158  | 25.7676  | 31.1947  | 36.6533  | 41.7845  | 46.5634  |
| 97.5% | 8.7502   | 11.6459  | 15.5589  | 20.6172  | 26.3957  | 33.1355  | 39.8633  | 47.1960  | 53.7348  | 59.7527  |
| 99%   | 11.1366  | 14.8388  | 20.0880  | 26.8722  | 34.6460  | 43.5060  | 52.5115  | 60.8410  | 69.3191  | 77.8155  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 37.5011  | 40.1997  | 42.7151  | 45.3080  | 47.5849  | 50.2427  | 52.6340  | 55.1923  | 57.7358  | 60.1697  |
| 95%   | 50.8440  | 54.7771  | 58.4716  | 62.0964  | 65.5763  | 68.7305  | 71.9708  | 75.4868  | 78.9630  | 82.4984  |
| 97.5% | 65.1031  | 70.1302  | 74.7395  | 79.5180  | 83.9400  | 88.2753  | 92.9309  | 97.5692  | 101.6504 | 106.6733 |
| 99%   | 85.0833  | 91.7963  | 98.5198  | 103.3475 | 109.1947 | 115.1149 | 121.0587 | 127.7161 | 134.0415 | 138.9856 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 62.8055  | 65.2224  | 67.7770  | 70.2437  | 72.8006  | 75.1545  | 77.6580  | 80.1614  | 82.6822  | 84.7998  |
| 95%   | 85.8103  | 89.6765  | 93.4994  | 96.7769  | 100.2165 | 103.7437 | 107.0141 | 110.5915 | 113.6581 | 117.2737 |
| 97.5% | 111.4492 | 116.4210 | 120.8460 | 125.3654 | 129.8803 | 133.5181 | 138.7089 | 144.0309 | 147.7344 | 151.7644 |
| 99%   | 145.3815 | 152.4365 | 159.5370 | 165.0261 | 170.7325 | 177.9247 | 182.8659 | 188.3606 | 195.2610 | 200.2069 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 86.8968  | 89.0813  | 91.4510  | 93.4870  | 95.7391  | 97.8183  | 100.0623 | 102.4695 | 104.6442 | 106.8204 |
| 95%   | 120.5318 | 123.9421 | 126.7771 | 130.0179 | 133.0619 | 136.3386 | 139.5003 | 142.4160 | 145.6638 | 148.4942 |
| 97.5% | 155.8770 | 160.6188 | 164.5931 | 169.0875 | 173.0194 | 176.8083 | 180.9276 | 185.3255 | 189.6825 | 193.2488 |
| 99%   | 207.3713 | 212.0750 | 218.1582 | 224.2181 | 228.9321 | 233.9347 | 240.3227 | 245.1459 | 249.6077 | 256.3316 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 108.6511 | 110.7585 | 113.0761 | 114.9148 | 117.1710 | 119.2588 | 121.0810 | 123.3226 | 125.4961 | 127.4652 |
| 95%   | 151.8922 | 154.5234 | 157.5977 | 160.4252 | 163.5192 | 166.5494 | 169.5156 | 172.3694 | 175.2020 | 178.3878 |
| 97.5% | 197.5347 | 201.7296 | 205.8568 | 209.7157 | 213.1704 | 217.1409 | 221.5332 | 225.2499 | 229.4230 | 233.4874 |
| 99%   | 261.4928 | 267.5223 | 273.8319 | 279.1323 | 284.1858 | 288.8554 | 293.5454 | 298.9364 | 304.8115 | 310.3367 |

Table 7: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and 2 regressors for the Bartlett kernel.



|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 3.3997   | 4.8401   | 6.8710   | 9.5521   | 12.6120  | 15.9424  | 19.0654  | 21.8628  | 24.2146  | 26.3260  |
| 95%   | 4.8717   | 7.0195   | 10.0269  | 13.9646  | 18.6120  | 23.3283  | 27.7549  | 31.7073  | 35.4151  | 38.3943  |
| 97.5% | 6.4862   | 9.3954   | 13.6047  | 19.0308  | 25.1964  | 31.5327  | 37.7531  | 43.0166  | 47.7203  | 51.6689  |
| 99%   | 8.6045   | 12.6544  | 18.4804  | 25.7603  | 34.4563  | 43.1166  | 51.1212  | 57.9367  | 64.3646  | 70.0376  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 28.2471  | 30.2523  | 32.2333  | 34.1831  | 36.3085  | 38.3264  | 40.6289  | 42.5830  | 44.5417  | 46.6032  |
| 95%   | 41.2423  | 44.1822  | 47.2269  | 50.0228  | 53.1556  | 56.2168  | 59.3044  | 62.8422  | 65.9416  | 68.9256  |
| 97.5% | 55.6295  | 59.9624  | 63.8357  | 68.5554  | 72.7310  | 76.5779  | 81.0454  | 85.0859  | 89.5836  | 94.0658  |
| 99%   | 76.2055  | 81.1118  | 87.7617  | 93.8642  | 100.0608 | 105.4060 | 110.5853 | 116.8339 | 123.1378 | 129.1515 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 48.5050  | 50.4169  | 52.3280  | 54.2104  | 56.1338  | 57.8689  | 59.7640  | 61.4336  | 63.0458  | 64.9345  |
| 95%   | 71.6560  | 74.3071  | 77.4083  | 80.2717  | 83.2369  | 86.0183  | 88.6318  | 91.2215  | 93.7178  | 96.9110  |
| 97.5% | 98.4301  | 101.7950 | 105.3833 | 109.8176 | 113.6977 | 117.5143 | 121.5252 | 125.3799 | 128.7088 | 133.3023 |
| 99%   | 134.2842 | 139.9794 | 145.5620 | 151.6596 | 157.3705 | 163.1026 | 166.7577 | 172.9845 | 178.0210 | 181.9378 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 66.7007  | 68.3441  | 70.1010  | 71.6975  | 73.3901  | 75.0647  | 76.3607  | 78.2325  | 80.1047  | 81.6481  |
| 95%   | 99.9368  | 102.0974 | 105.2883 | 107.4012 | 109.6231 | 112.6881 | 115.1149 | 117.6703 | 120.2112 | 122.5176 |
| 97.5% | 136.5103 | 140.6412 | 143.6772 | 147.4526 | 150.5053 | 154.8911 | 158.5674 | 161.9881 | 165.4601 | 168.3626 |
| 99%   | 187.8390 | 193.7464 | 199.2971 | 203.6457 | 208.9660 | 213.0403 | 218.4647 | 223.0665 | 229.6896 | 234.0580 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 83.2688  | 84.7932  | 86.3738  | 87.8820  | 89.4423  | 90.9183  | 92.4963  | 94.0847  | 95.5286  | 97.0559  |
| 95%   | 124.9734 | 127.8111 | 129.7171 | 132.1354 | 134.8548 | 137.2407 | 139.6061 | 141.9620 | 144.4394 | 146.8598 |
| 97.5% | 171.7536 | 175.4396 | 178.9248 | 181.6517 | 185.5766 | 188.8326 | 192.4008 | 195.8725 | 199.0768 | 202.6138 |
| 99%   | 239.4892 | 244.2322 | 248.8636 | 251.6197 | 258.3054 | 263.3562 | 268.6434 | 273.1031 | 277.7985 | 282.8897 |

Table 8: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 3 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 5.8212   | 8.4096   | 12.0316  | 16.7218  | 22.1611  | 27.8433  | 33.3174  | 38.1413  | 42.1943  | 45.9647  |
| 95%   | 7.7003   | 11.1415  | 16.1350  | 22.5613  | 30.0327  | 37.6877  | 44.9839  | 51.2530  | 56.6109  | 61.7652  |
| 97.5% | 9.6270   | 14.0892  | 20.4741  | 28.7101  | 38.1293  | 47.7987  | 57.0077  | 64.9318  | 71.9120  | 78.2640  |
| 99%   | 12.1575  | 18.1236  | 26.5007  | 37.3929  | 49.7561  | 62.1388  | 73.7636  | 84.5630  | 93.7090  | 101.8420 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 49.4447  | 52.9323  | 56.3340  | 60.1312  | 63.6406  | 67.4499  | 71.2430  | 74.8075  | 78.4522  | 82.2609  |
| 95%   | 66.5486  | 71.3544  | 76.0562  | 81.2289  | 86.1881  | 91.2592  | 96.5805  | 101.8176 | 106.7877 | 111.6608 |
| 97.5% | 84.2200  | 90.5239  | 96.9258  | 104.0041 | 110.3109 | 116.8821 | 123.6351 | 129.8765 | 136.0994 | 142.8073 |
| 99%   | 109.4898 | 118.0299 | 126.3046 | 134.7369 | 143.2936 | 152.1868 | 161.8652 | 170.6461 | 178.8355 | 186.7112 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 85.7345  | 89.0484  | 92.6489  | 95.7692  | 99.2487  | 102.2953 | 105.6998 | 108.8969 | 112.3129 | 115.2193 |
| 95%   | 116.4486 | 121.2347 | 125.8037 | 130.3758 | 135.4547 | 140.3515 | 144.7571 | 149.1126 | 153.5504 | 158.2696 |
| 97.5% | 150.3162 | 155.3143 | 161.0308 | 167.2409 | 174.1114 | 179.5163 | 186.1424 | 191.5261 | 198.4419 | 204.5116 |
| 99%   | 193.8605 | 202.4292 | 212.1917 | 220.8417 | 227.9821 | 236.3410 | 243.4179 | 251.5400 | 259.9531 | 267.5787 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 118.5999 | 121.6288 | 124.6565 | 127.5841 | 130.9079 | 133.9429 | 136.5571 | 139.8927 | 142.7780 | 145.9475 |
| 95%   | 162.6918 | 166.8179 | 170.7475 | 175.6046 | 179.3669 | 184.6561 | 188.5588 | 192.8031 | 196.8194 | 201.0944 |
| 97.5% | 210.2827 | 215.1444 | 220.8692 | 226.1655 | 233.7037 | 239.1656 | 243.8187 | 249.3257 | 254.7457 | 260.9679 |
| 99%   | 274.7371 | 282.6967 | 291.6986 | 297.7458 | 305.6844 | 315.3061 | 320.8822 | 327.5476 | 336.2433 | 341.5942 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 148.6887 | 151.3495 | 154.1311 | 157.2370 | 160.5343 | 163.0980 | 165.6256 | 168.6339 | 171.6833 | 174.4403 |
| 95%   | 205.9369 | 209.3833 | 213.5730 | 217.3425 | 221.6425 | 226.0933 | 229.7050 | 233.7356 | 237.9880 | 241.8387 |
| 97.5% | 266.3507 | 272.7794 | 277.9359 | 283.0327 | 287.9984 | 294.0388 | 299.3482 | 304.0141 | 309.0443 | 314.5975 |
| 99%   | 349.4047 | 358.4340 | 364.8856 | 372.5580 | 378.7735 | 386.2201 | 393.6412 | 402.5244 | 409.5253 | 416.0434 |

Table 9: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and 3 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 7.9477   | 11.4557  | 16.4527  | 23.0255  | 30.5912  | 38.3950  | 45.7700  | 52.3132  | 57.9197  | 63.1360  |
| 95%   | 10.0979  | 14.6992  | 21.3035  | 29.9996  | 39.9189  | 49.8013  | 59.2554  | 67.8589  | 75.1998  | 81.8910  |
| 97.5% | 12.2521  | 18.0158  | 26.3534  | 37.1592  | 49.3937  | 61.7584  | 73.1558  | 83.2492  | 92.4248  | 100.7392 |
| 99%   | 15.0592  | 22.3423  | 33.3917  | 47.2126  | 62.0977  | 77.7442  | 91.7871  | 104.7011 | 116.3626 | 127.0406 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 68.0520  | 72.6928  | 77.3734  | 82.4213  | 87.7955  | 92.9961  | 98.3938  | 103.3362 | 108.6797 | 113.4435 |
| 95%   | 88.2243  | 94.6412  | 101.0740 | 107.6796 | 114.1293 | 121.2607 | 128.2295 | 135.1659 | 141.8451 | 148.6521 |
| 97.5% | 109.4414 | 117.3214 | 125.3002 | 133.6698 | 141.9307 | 150.6805 | 158.7414 | 168.2084 | 177.1739 | 185.5864 |
| 99%   | 137.5721 | 146.0534 | 157.2061 | 170.4756 | 180.7735 | 192.4061 | 202.9157 | 212.8851 | 223.1542 | 233.0523 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 118.2354 | 122.6793 | 127.5508 | 132.4233 | 137.1208 | 141.7603 | 146.2964 | 150.6620 | 155.4389 | 159.9627 |
| 95%   | 154.6266 | 161.2199 | 167.8923 | 173.9862 | 180.3062 | 186.0539 | 192.1796 | 199.0962 | 205.4411 | 211.5221 |
| 97.5% | 193.5419 | 201.8619 | 209.2914 | 217.6441 | 224.8478 | 232.3579 | 240.6780 | 249.6349 | 257.8802 | 265.3875 |
| 99%   | 245.7677 | 258.3402 | 266.8330 | 276.5978 | 286.3944 | 295.7908 | 306.3358 | 314.8817 | 325.6062 | 335.9501 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 164.4769 | 168.9907 | 172.9061 | 177.3167 | 181.4780 | 186.1642 | 190.4106 | 194.2989 | 198.4324 | 202.7766 |
| 95%   | 217.1416 | 222.7042 | 228.2099 | 234.5617 | 240.7945 | 247.4845 | 252.8325 | 257.5620 | 264.1695 | 269.5110 |
| 97.5% | 272.8837 | 280.2944 | 287.4400 | 295.1258 | 302.2759 | 309.8084 | 317.5996 | 325.5985 | 332.1473 | 339.3945 |
| 99%   | 346.6451 | 356.4531 | 366.6747 | 376.6130 | 384.9591 | 396.6903 | 403.3821 | 413.2490 | 423.8310 | 431.9987 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 207.5440 | 211.0894 | 214.7558 | 219.1745 | 223.5195 | 227.6702 | 231.5200 | 235.5025 | 239.6190 | 243.7860 |
| 95%   | 275.0684 | 280.9242 | 286.8255 | 292.7180 | 298.0492 | 302.6209 | 308.8627 | 314.5787 | 320.1482 | 325.6365 |
| 97.5% | 346.6555 | 354.0922 | 361.7046 | 369.0515 | 376.1460 | 382.9065 | 389.9857 | 397.9710 | 404.8902 | 412.0370 |
| 99%   | 442.1159 | 452.3541 | 459.6266 | 469.9422 | 478.2963 | 487.6296 | 497.4335 | 506.4945 | 514.8260 | 524.6208 |

Table 10: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and 3 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 3.7030   | 5.8102   | 8.9636   | 12.9915  | 17.1697  | 20.9581  | 24.1998  | 26.9800  | 29.4269  | 32.0464  |
| 95%   | 5.3126   | 8.4235   | 13.0016  | 18.8926  | 25.0179  | 30.4945  | 35.1169  | 39.1001  | 43.0079  | 46.9745  |
| 97.5% | 7.0176   | 11.2000  | 17.4138  | 25.3701  | 33.4703  | 40.6735  | 46.7229  | 52.2559  | 57.4710  | 62.5916  |
| 99%   | 9.3570   | 15.1840  | 23.8175  | 34.3634  | 45.1863  | 54.9914  | 62.9772  | 70.8412  | 78.0107  | 85.0048  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 34.6858  | 37.4871  | 40.2407  | 42.9912  | 45.8573  | 48.1551  | 50.9198  | 53.5060  | 55.9463  | 58.3483  |
| 95%   | 50.6881  | 54.5927  | 58.6391  | 62.9499  | 66.9437  | 71.0196  | 74.7979  | 78.4874  | 81.8688  | 85.4499  |
| 97.5% | 67.8938  | 73.3622  | 78.9856  | 84.5873  | 89.9295  | 95.4450  | 101.0209 | 105.7385 | 110.9372 | 115.9588 |
| 99%   | 92.0947  | 100.1739 | 107.8496 | 114.2089 | 122.2869 | 129.8120 | 137.3511 | 144.5326 | 150.8973 | 159.2862 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 60.8114  | 63.3231  | 65.8978  | 68.1544  | 70.3576  | 72.7107  | 75.0689  | 77.0493  | 79.4446  | 81.7725  |
| 95%   | 89.3740  | 92.9540  | 96.7067  | 100.0385 | 103.3718 | 106.9393 | 110.4480 | 113.9215 | 117.6781 | 120.6666 |
| 97.5% | 121.1336 | 125.9986 | 130.8450 | 136.0059 | 140.6774 | 145.8448 | 149.9893 | 154.7101 | 159.6300 | 164.1247 |
| 99%   | 166.7945 | 172.4129 | 178.3234 | 184.9823 | 192.0277 | 199.5419 | 206.5012 | 213.9169 | 219.6617 | 225.8788 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 83.8820  | 86.1264  | 88.4267  | 90.4237  | 92.6605  | 94.5621  | 96.7732  | 98.9651  | 100.9575 | 103.0451 |
| 95%   | 123.5406 | 126.9512 | 130.4103 | 133.8465 | 136.9293 | 140.4858 | 143.0511 | 146.2213 | 149.6269 | 152.8300 |
| 97.5% | 169.5144 | 174.6120 | 178.0300 | 182.6291 | 187.5450 | 191.2215 | 195.9266 | 200.7124 | 205.2149 | 209.9962 |
| 99%   | 232.0890 | 239.7991 | 244.7817 | 252.2818 | 259.4887 | 265.3828 | 270.8689 | 277.7884 | 282.7763 | 290.2516 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 104.8618 | 106.7526 | 109.0773 | 110.8577 | 112.9737 | 114.8494 | 116.6330 | 118.4464 | 120.3396 | 122.3722 |
| 95%   | 155.8959 | 158.8472 | 161.6578 | 164.9173 | 168.1041 | 170.8390 | 173.9462 | 177.0808 | 180.1163 | 183.2967 |
| 97.5% | 214.5266 | 218.5550 | 222.0470 | 226.6231 | 231.1604 | 235.2527 | 239.3614 | 243.6544 | 247.4493 | 251.9498 |
| 99%   | 296.5495 | 302.7511 | 307.3948 | 313.8596 | 320.0895 | 326.7997 | 333.0742 | 337.8476 | 344.3680 | 349.5222 |

Table 11: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 4 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 6.3917   | 10.0663  | 15.5979  | 22.5674  | 29.9795  | 36.7008  | 42.2016  | 47.0835  | 51.5500  | 55.9909  |
| 95%   | 8.4257   | 13.4885  | 20.9648  | 30.4696  | 40.0729  | 49.0548  | 56.4680  | 63.0276  | 68.8749  | 75.2042  |
| 97.5% | 10.5478  | 17.0123  | 26.6355  | 38.4682  | 50.7116  | 62.1885  | 71.6679  | 79.6497  | 87.2040  | 95.3204  |
| 99%   | 13.3423  | 21.7956  | 34.0956  | 49.6483  | 65.1177  | 78.9886  | 91.1437  | 101.4414 | 111.6495 | 121.8610 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 60.9262  | 65.7195  | 70.6997  | 75.8617  | 80.5451  | 85.3065  | 89.5637  | 94.2915  | 98.7702  | 103.1649 |
| 95%   | 81.3736  | 88.2746  | 95.3176  | 101.8292 | 108.2910 | 114.2026 | 120.7081 | 127.7767 | 133.7546 | 139.4140 |
| 97.5% | 103.6097 | 112.5346 | 121.0707 | 129.4872 | 137.9504 | 145.6932 | 153.8332 | 161.9942 | 169.8672 | 178.4015 |
| 99%   | 133.3191 | 143.8804 | 155.2074 | 166.0604 | 177.9326 | 188.1836 | 196.5584 | 207.6817 | 217.8183 | 229.0459 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 107.6285 | 111.8713 | 116.2074 | 120.6861 | 124.8767 | 128.9624 | 133.0928 | 137.1413 | 141.0300 | 145.2946 |
| 95%   | 145.7321 | 151.3809 | 157.2270 | 163.3648 | 169.4210 | 174.9631 | 180.3961 | 186.0080 | 192.3084 | 197.4457 |
| 97.5% | 186.0228 | 192.6898 | 200.6119 | 209.0320 | 216.1616 | 224.5543 | 231.7696 | 237.9518 | 246.1181 | 252.6450 |
| 99%   | 240.2054 | 248.0804 | 257.5845 | 269.3945 | 280.0538 | 290.0360 | 298.8088 | 308.1435 | 318.0354 | 328.9629 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 149.2918 | 153.2714 | 157.2346 | 160.9287 | 164.9160 | 169.0445 | 172.9093 | 176.2452 | 180.0940 | 183.9292 |
| 95%   | 203.4750 | 208.4592 | 214.4420 | 219.5585 | 225.0415 | 230.8944 | 236.3718 | 241.6010 | 247.0982 | 251.9859 |
| 97.5% | 261.0604 | 267.1629 | 275.6508 | 283.3842 | 288.4316 | 295.9033 | 303.4084 | 310.3352 | 317.6927 | 324.3533 |
| 99%   | 338.7192 | 347.2950 | 356.3324 | 367.5221 | 375.6361 | 385.3675 | 396.4273 | 404.0969 | 412.5841 | 422.9061 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 187.6360 | 191.0578 | 195.1243 | 198.6422 | 202.0533 | 205.9373 | 209.3236 | 212.6604 | 216.5108 | 220.0232 |
| 95%   | 257.5606 | 262.7996 | 267.6380 | 272.7521 | 278.2585 | 283.3119 | 288.5730 | 292.9341 | 298.1478 | 303.4306 |
| 97.5% | 331.1501 | 337.5320 | 344.3518 | 351.7115 | 359.2279 | 366.1371 | 372.2857 | 378.9446 | 386.1002 | 393.2516 |
| 99%   | 431.2242 | 441.0952 | 451.5853 | 460.9851 | 468.1378 | 477.0545 | 487.3636 | 494.6490 | 506.4133 | 515.0963 |

Table 12: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and 4 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 8.6401   | 13.6981  | 21.2851  | 30.9202  | 40.8987  | 49.9667  | 57.6091  | 64.0085  | 70.1192  | 76.5017  |
| 95%   | 10.9847  | 17.6229  | 27.4186  | 39.8642  | 52.6914  | 64.0754  | 73.7043  | 82.0103  | 90.2588  | 98.4154  |
| 97.5% | 13.2969  | 21.6350  | 33.9915  | 49.0397  | 64.8288  | 78.9650  | 90.7395  | 100.9522 | 111.4490 | 121.6844 |
| 99%   | 16.4726  | 27.0731  | 43.0177  | 61.8207  | 81.3445  | 98.6815  | 113.7952 | 126.5949 | 139.9141 | 153.1379 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 82.9231  | 89.6576  | 96.3485  | 103.2873 | 110.0586 | 115.8029 | 122.1223 | 128.6799 | 134.8603 | 141.0957 |
| 95%   | 106.9648 | 115.9268 | 124.8137 | 133.3386 | 142.2440 | 150.4851 | 159.1904 | 167.4299 | 175.7081 | 184.2789 |
| 97.5% | 131.7080 | 142.9302 | 153.2503 | 164.6159 | 175.2121 | 186.5221 | 196.2744 | 207.7725 | 218.1933 | 227.7908 |
| 99%   | 166.4333 | 180.1069 | 195.3864 | 208.5882 | 221.5372 | 236.0473 | 250.6708 | 260.4346 | 274.5878 | 287.2346 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 146.6923 | 152.9731 | 158.7869 | 164.1766 | 170.0416 | 176.2872 | 181.7025 | 187.9634 | 193.3736 | 199.1635 |
| 95%   | 191.4476 | 199.4217 | 207.9661 | 215.2661 | 223.1437 | 231.1947 | 238.7688 | 247.2229 | 253.9688 | 260.5043 |
| 97.5% | 238.0043 | 247.4064 | 257.0714 | 267.1800 | 277.4510 | 286.4701 | 296.3261 | 305.7265 | 315.1384 | 324.9834 |
| 99%   | 303.8614 | 315.5027 | 326.2485 | 338.9603 | 351.7251 | 364.9037 | 376.7498 | 390.4770 | 402.1668 | 415.2611 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 204.1480 | 209.9160 | 215.3857 | 220.7675 | 225.4271 | 231.5545 | 237.1106 | 242.4760 | 247.0911 | 252.4771 |
| 95%   | 268.4619 | 276.3587 | 284.2469 | 290.7246 | 297.8539 | 305.4991 | 312.8272 | 319.0507 | 326.9164 | 334.3382 |
| 97.5% | 333.0735 | 343.9393 | 353.1220 | 363.3063 | 372.1849 | 380.9183 | 388.9802 | 398.4436 | 407.4212 | 417.1579 |
| 99%   | 427.5479 | 437.2077 | 450.3391 | 463.8458 | 477.0444 | 489.4479 | 498.6885 | 510.8387 | 522.1953 | 536.6322 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 257.5109 | 262.8752 | 267.8038 | 273.7314 | 278.1576 | 283.0914 | 288.1825 | 293.2285 | 298.2935 | 303.4836 |
| 95%   | 342.0509 | 349.0890 | 355.8531 | 362.5935 | 369.2369 | 376.2787 | 383.2161 | 389.1195 | 396.8079 | 403.6126 |
| 97.5% | 425.5625 | 434.9986 | 443.0947 | 452.4067 | 462.2226 | 469.5741 | 478.9159 | 488.2291 | 497.1772 | 506.4930 |
| 99%   | 548.7774 | 558.7018 | 571.1408 | 582.4926 | 593.4980 | 607.3366 | 617.4244 | 629.2271 | 642.5296 | 653.7396 |

Table 13: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and 4 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 10.8190  | 17.2546  | 26.8557  | 39.0344  | 51.4749  | 62.6886  | 72.3341  | 80.8099  | 88.5707  | 96.4344  |
| 95%   | 13.4773  | 21.6258  | 33.8305  | 49.0887  | 64.7013  | 79.0381  | 91.1262  | 101.3406 | 111.6674 | 121.4398 |
| 97.5% | 16.0859  | 26.2263  | 41.0967  | 59.6494  | 78.4597  | 95.5039  | 110.3437 | 122.8798 | 135.2026 | 147.9332 |
| 99%   | 19.3970  | 32.0374  | 51.1077  | 73.9720  | 96.3531  | 117.1179 | 135.1349 | 151.1481 | 166.5063 | 182.4683 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 104.8052 | 113.0165 | 121.8379 | 130.6994 | 139.1921 | 147.6272 | 155.3941 | 163.4406 | 171.3279 | 178.8829 |
| 95%   | 132.2570 | 142.8248 | 154.0466 | 165.2468 | 176.4927 | 186.0570 | 196.4661 | 207.0213 | 217.5137 | 227.5881 |
| 97.5% | 160.7315 | 173.4650 | 187.7269 | 201.0637 | 214.1871 | 227.6808 | 239.2570 | 252.6580 | 265.9304 | 278.5675 |
| 99%   | 199.0431 | 214.9165 | 231.8176 | 250.0637 | 266.5075 | 283.2865 | 298.5566 | 313.8112 | 329.7428 | 347.0549 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 186.6908 | 194.5004 | 202.2595 | 209.8889 | 217.2184 | 225.1332 | 232.6720 | 239.8652 | 246.8533 | 254.0904 |
| 95%   | 237.4174 | 247.8663 | 257.0632 | 267.1369 | 276.4600 | 286.6444 | 296.5284 | 306.0444 | 316.0806 | 324.1581 |
| 97.5% | 289.5427 | 302.2221 | 315.1470 | 324.7735 | 338.5186 | 351.5039 | 363.0043 | 375.3796 | 386.0734 | 398.7413 |
| 99%   | 359.6742 | 375.4321 | 394.5655 | 410.2341 | 425.6042 | 440.9684 | 453.5043 | 468.3743 | 483.7232 | 500.3770 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 261.5825 | 268.8259 | 276.2652 | 282.4398 | 290.0715 | 296.9543 | 304.2397 | 310.4095 | 317.4097 | 324.6398 |
| 95%   | 333.9677 | 343.8796 | 352.9189 | 362.4017 | 369.1693 | 379.1216 | 389.3474 | 397.7903 | 407.3195 | 416.4943 |
| 97.5% | 410.3193 | 419.3541 | 432.0531 | 444.9949 | 455.8020 | 465.2139 | 479.9825 | 488.9181 | 501.0330 | 511.0682 |
| 99%   | 512.6486 | 529.3560 | 543.9628 | 560.7796 | 569.8389 | 586.4466 | 597.2639 | 615.5721 | 631.6010 | 644.9227 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 331.0483 | 337.9541 | 344.7678 | 351.2450 | 357.6029 | 363.5248 | 371.1005 | 377.5221 | 384.2335 | 390.4799 |
| 95%   | 425.1937 | 434.2297 | 441.4701 | 450.8377 | 460.1428 | 469.1083 | 476.9740 | 485.7582 | 495.1230 | 503.7423 |
| 97.5% | 522.1549 | 534.4662 | 545.3727 | 556.3320 | 568.0137 | 576.8596 | 589.1824 | 598.8742 | 609.8630 | 620.7861 |
| 99%   | 658.5966 | 670.2712 | 685.1637 | 698.2773 | 710.3632 | 726.4853 | 741.9583 | 756.0800 | 767.5832 | 781.6024 |

Table 14: Fixed-b critical values for Wald test for 4 hypotheses in regression with intercept and 4 regressors for the Bartlett kernel.

## 2 Parzen Kernel (Intercept Only)

### 2.1 t-Test

|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 95%   | 1.6626  | 1.7617  | 1.8679  | 1.9883  | 2.1236  | 2.2736  | 2.4408  | 2.6295  | 2.8269  | 3.0477  |
| 97.5% | 1.9974  | 2.1206  | 2.2633  | 2.4227  | 2.6043  | 2.8009  | 3.0210  | 3.2698  | 3.5371  | 3.8343  |
| 99%   | 2.4045  | 2.5681  | 2.7605  | 2.9665  | 3.1957  | 3.4479  | 3.7431  | 4.0779  | 4.4427  | 4.8642  |
| 99.5% | 2.6974  | 2.8817  | 3.0997  | 3.3516  | 3.6514  | 4.0009  | 4.3704  | 4.7766  | 5.2249  | 5.7045  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 3.2980  | 3.5685  | 3.8531  | 4.1557  | 4.4797  | 4.8182  | 5.1824  | 5.5667  | 5.9722  | 6.3944  |
| 97.5% | 4.1629  | 4.5039  | 4.8958  | 5.3285  | 5.7940  | 6.2714  | 6.7614  | 7.2746  | 7.8287  | 8.3860  |
| 99%   | 5.3347  | 5.8421  | 6.3816  | 6.9599  | 7.5750  | 8.2679  | 8.9965  | 9.7637  | 10.5672 | 11.3033 |
| 99.5% | 6.2557  | 6.8615  | 7.5400  | 8.2700  | 9.0485  | 9.8525  | 10.7652 | 11.6820 | 12.6849 | 13.6571 |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 6.8159  | 7.2556  | 7.6708  | 8.1050  | 8.5438  | 8.9536  | 9.3800  | 9.8139  | 10.2189 | 10.6134 |
| 97.5% | 8.9425  | 9.5370  | 10.1261 | 10.7507 | 11.3617 | 11.9565 | 12.5404 | 13.1063 | 13.6972 | 14.2953 |
| 99%   | 12.0789 | 12.9495 | 13.8148 | 14.6127 | 15.4862 | 16.2969 | 17.0975 | 18.0170 | 18.7431 | 19.4992 |
| 99.5% | 14.7413 | 15.6772 | 16.6173 | 17.6701 | 18.8500 | 19.9046 | 20.8665 | 21.9122 | 22.8955 | 23.8544 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 10.9961 | 11.3294 | 11.6685 | 12.0021 | 12.3091 | 12.6106 | 12.8761 | 13.1259 | 13.3769 | 13.6133 |
| 97.5% | 14.8689 | 15.3773 | 15.8500 | 16.3886 | 16.8237 | 17.2358 | 17.7205 | 18.1444 | 18.5419 | 18.9926 |
| 99%   | 20.3316 | 21.0560 | 21.8426 | 22.4942 | 23.1897 | 23.9372 | 24.4912 | 25.1509 | 25.8149 | 26.4053 |
| 99.5% | 24.7358 | 25.8208 | 26.6179 | 27.6938 | 28.4686 | 29.2078 | 29.9422 | 30.7058 | 31.4627 | 32.2152 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 13.8696 | 14.0722 | 14.2900 | 14.4822 | 14.6754 | 14.8766 | 15.0771 | 15.2769 | 15.4710 | 15.6449 |
| 97.5% | 19.3973 | 19.7386 | 20.0997 | 20.4441 | 20.7566 | 21.0599 | 21.3838 | 21.7304 | 21.9977 | 22.2688 |
| 99%   | 26.9829 | 27.4575 | 27.9966 | 28.5455 | 29.0519 | 29.5477 | 30.0323 | 30.6276 | 31.1273 | 31.6553 |
| 99.5% | 32.9038 | 33.6890 | 34.4838 | 35.0782 | 35.7189 | 36.3998 | 37.2160 | 38.0068 | 38.5603 | 39.3052 |

Table 15: Fixed-b critical values for t-test in regression with intercept and 1 regressors for the Parzen kernel (Upper tail).



|       |         |         |         |         |         |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
| 95%   | 1.7243  | 1.8921  | 2.0964  | 2.3374  | 2.6147  | 2.9333  | 3.3073  | 3.7335  | 4.2120  | 4.7619  |
| 97.5% | 2.0581  | 2.2782  | 2.5376  | 2.8367  | 3.1874  | 3.6014  | 4.0701  | 4.6278  | 5.2657  | 5.9929  |
| 99%   | 2.4701  | 2.7323  | 3.0626  | 3.4351  | 3.8906  | 4.4313  | 5.0724  | 5.8116  | 6.6698  | 7.6517  |
| 99.5% | 2.7324  | 3.0651  | 3.4394  | 3.8797  | 4.4036  | 5.0464  | 5.8147  | 6.7286  | 7.7782  | 8.9947  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 5.3753  | 6.0363  | 6.7585  | 7.5023  | 8.2830  | 9.0696  | 9.8634  | 10.6364 | 11.3787 | 12.1549 |
| 97.5% | 6.7879  | 7.6875  | 8.6360  | 9.6593  | 10.6834 | 11.8099 | 12.8783 | 13.9615 | 15.0238 | 16.0041 |
| 99%   | 8.7279  | 9.9370  | 11.2836 | 12.6853 | 14.1302 | 15.5746 | 17.1231 | 18.5052 | 19.9665 | 21.3243 |
| 99.5% | 10.2960 | 11.6982 | 13.2401 | 15.0675 | 16.9487 | 18.7014 | 20.6128 | 22.3106 | 23.9191 | 25.6174 |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 12.8024 | 13.4494 | 14.0381 | 14.6526 | 15.2499 | 15.7490 | 16.2658 | 16.7563 | 17.1672 | 17.5788 |
| 97.5% | 16.9862 | 17.8818 | 18.8161 | 19.6695 | 20.5571 | 21.2746 | 21.9480 | 22.6663 | 23.2728 | 24.0074 |
| 99%   | 22.6197 | 23.9365 | 25.1914 | 26.4106 | 27.4751 | 28.5726 | 29.5310 | 30.5405 | 31.5135 | 32.5556 |
| 99.5% | 27.2955 | 28.8278 | 30.1656 | 31.6134 | 33.0073 | 34.5719 | 35.6407 | 37.0739 | 38.6229 | 39.6923 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 17.9220 | 18.3058 | 18.6603 | 19.0262 | 19.3559 | 19.6693 | 19.9945 | 20.2923 | 20.6148 | 20.9770 |
| 97.5% | 24.5958 | 25.2226 | 25.7662 | 26.3590 | 26.9209 | 27.5112 | 28.0695 | 28.6557 | 29.2037 | 29.8150 |
| 99%   | 33.5774 | 34.5787 | 35.5368 | 36.4697 | 37.5272 | 38.5306 | 39.4749 | 40.4607 | 41.4195 | 42.5736 |
| 99.5% | 41.2430 | 42.4037 | 43.3518 | 44.7217 | 46.2735 | 47.4573 | 48.7601 | 50.0325 | 51.3103 | 52.4297 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 21.3220 | 21.6465 | 21.9824 | 22.3384 | 22.6755 | 23.0574 | 23.3154 | 23.6239 | 23.9396 | 24.2458 |
| 97.5% | 30.4632 | 31.0395 | 31.6661 | 32.2623 | 32.7190 | 33.3052 | 33.8013 | 34.4213 | 35.0503 | 35.5951 |
| 99%   | 43.5816 | 44.4234 | 45.5628 | 46.3492 | 47.0996 | 48.1464 | 49.0123 | 50.0777 | 51.0267 | 51.8311 |
| 99.5% | 53.6563 | 55.3350 | 56.9737 | 58.4391 | 59.5165 | 60.9455 | 62.3795 | 63.6192 | 64.8085 | 66.0173 |

Table 16: Fixed-b critical values for t-test in regression with intercept and 2 regressors for the Parzen kernel (Upper tail).

|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 95%   | 1.7707  | 2.0281  | 2.3433  | 2.7293  | 3.2067  | 3.7759  | 4.4637  | 5.2690  | 6.2096  | 7.2428  |
| 97.5% | 2.1159  | 2.4430  | 2.8385  | 3.3321  | 3.9430  | 4.6724  | 5.5609  | 6.5962  | 7.8150  | 9.1915  |
| 99%   | 2.5106  | 2.9071  | 3.4188  | 4.0538  | 4.8325  | 5.8116  | 7.0145  | 8.4319  | 10.0347 | 11.8551 |
| 99.5% | 2.7919  | 3.2496  | 3.8521  | 4.6205  | 5.5479  | 6.6973  | 8.0437  | 9.7116  | 11.6377 | 13.8209 |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 8.3759  | 9.5598  | 10.7790 | 11.9956 | 13.1609 | 14.2366 | 15.2590 | 16.1888 | 17.0068 | 17.7787 |
| 97.5% | 10.6702 | 12.2175 | 13.8573 | 15.4381 | 17.0016 | 18.4328 | 19.7814 | 21.0377 | 22.1792 | 23.2187 |
| 99%   | 13.8038 | 15.8733 | 18.0152 | 20.1144 | 22.1716 | 24.1593 | 26.0697 | 27.8999 | 29.4099 | 30.7885 |
| 99.5% | 16.2755 | 18.8947 | 21.2643 | 23.7686 | 26.0558 | 28.5262 | 30.7763 | 32.8988 | 34.9585 | 36.8021 |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 18.4678 | 19.1328 | 19.7276 | 20.3355 | 20.9269 | 21.5454 | 22.0943 | 22.6922 | 23.2971 | 23.8151 |
| 97.5% | 24.2159 | 25.1831 | 26.1618 | 27.0602 | 27.9556 | 28.8260 | 29.7228 | 30.6235 | 31.4582 | 32.3839 |
| 99%   | 32.3164 | 33.7782 | 35.1967 | 36.7075 | 38.0862 | 39.5020 | 40.9593 | 42.3278 | 43.9060 | 45.0231 |
| 99.5% | 38.7182 | 40.4497 | 42.0094 | 43.7497 | 45.6484 | 47.3577 | 49.0170 | 50.6223 | 52.6740 | 54.1546 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 24.2998 | 24.8242 | 25.2976 | 25.8476 | 26.3138 | 26.7589 | 27.2306 | 27.7654 | 28.1201 | 28.5934 |
| 97.5% | 33.3228 | 34.2662 | 35.2130 | 36.0563 | 36.9458 | 37.8033 | 38.6795 | 39.6150 | 40.4906 | 41.4209 |
| 99%   | 46.4316 | 47.7969 | 49.1026 | 50.6067 | 52.1211 | 53.3478 | 54.7788 | 56.4161 | 57.9181 | 59.5722 |
| 99.5% | 56.1653 | 58.1390 | 60.5485 | 62.4055 | 64.3694 | 66.6916 | 68.7047 | 70.7812 | 72.7126 | 74.4820 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 28.9951 | 29.4151 | 29.8174 | 30.2531 | 30.6147 | 30.9949 | 31.4435 | 31.7740 | 32.1144 | 32.4763 |
| 97.5% | 42.1753 | 42.9327 | 43.7297 | 44.5310 | 45.3225 | 45.9680 | 46.7328 | 47.2165 | 47.8419 | 48.5894 |
| 99%   | 60.8204 | 61.9548 | 63.5287 | 64.8632 | 66.1990 | 67.3604 | 68.7744 | 70.3452 | 71.6373 | 72.4798 |
| 99.5% | 76.3019 | 78.0830 | 80.3701 | 82.0117 | 83.6065 | 85.4395 | 86.3750 | 88.2161 | 90.6917 | 92.2133 |

Table 17: Fixed-b critical values for t-test in regression with intercept and 3 regressors for the Parzen kernel (Upper tail).

|       | 0.02    | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 95%   | 1.8239  | 2.1770   | 2.6371   | 3.2221   | 3.9637   | 4.8967   | 6.0565   | 7.4047   | 8.9343   | 10.5481  |
| 97.5% | 2.1861  | 2.6288   | 3.1893   | 3.9208   | 4.8675   | 6.0606   | 7.5502   | 9.3036   | 11.2588  | 13.3906  |
| 99%   | 2.5904  | 3.1268   | 3.8453   | 4.7981   | 6.0381   | 7.5752   | 9.5190   | 11.7938  | 14.3342  | 17.0450  |
| 99.5% | 2.8658  | 3.4807   | 4.3160   | 5.4437   | 6.8907   | 8.7430   | 11.0398  | 13.6949  | 16.6955  | 19.9113  |
|       | 0.22    | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 12.1716 | 13.7575  | 15.2273  | 16.5750  | 17.7704  | 18.8176  | 19.7348  | 20.6067  | 21.4536  | 22.2236  |
| 97.5% | 15.5998 | 17.6987  | 19.5657  | 21.3661  | 22.8521  | 24.3221  | 25.6463  | 27.0734  | 28.2800  | 29.4857  |
| 99%   | 19.9304 | 22.7105  | 25.2358  | 27.7565  | 30.1384  | 32.2650  | 34.0046  | 35.7093  | 37.2833  | 39.1952  |
| 99.5% | 23.1356 | 26.3130  | 29.5255  | 32.2727  | 34.9161  | 37.3478  | 39.5138  | 41.8730  | 44.1256  | 46.6340  |
|       | 0.42    | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 23.0694 | 23.8674  | 24.6071  | 25.3780  | 26.1439  | 26.8649  | 27.5824  | 28.2836  | 29.0495  | 29.6811  |
| 97.5% | 30.7187 | 31.9044  | 33.1073  | 34.2929  | 35.4610  | 36.7681  | 38.1082  | 39.2444  | 40.2837  | 41.5174  |
| 99%   | 41.0469 | 42.9020  | 44.9533  | 46.8218  | 48.7943  | 50.8925  | 52.6743  | 54.3864  | 56.2472  | 58.0989  |
| 99.5% | 48.9134 | 51.2337  | 54.0426  | 56.2909  | 59.1098  | 61.5961  | 64.4424  | 66.7370  | 69.3259  | 71.2789  |
|       | 0.62    | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 30.3146 | 30.9719  | 31.5908  | 32.2313  | 32.7829  | 33.3496  | 33.9242  | 34.4531  | 34.9763  | 35.3982  |
| 97.5% | 42.5992 | 43.7218  | 44.8654  | 46.0307  | 47.1013  | 48.1340  | 49.2185  | 50.2140  | 51.0632  | 51.9202  |
| 99%   | 59.7549 | 61.9386  | 63.7315  | 65.7030  | 67.3838  | 69.0896  | 70.7231  | 72.6661  | 74.5341  | 76.3053  |
| 99.5% | 73.7390 | 76.1980  | 79.0390  | 81.4120  | 84.0076  | 86.5050  | 88.7602  | 90.8194  | 93.3061  | 96.0451  |
|       | 0.82    | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 35.9173 | 36.3878  | 36.8553  | 37.3236  | 37.7333  | 38.0845  | 38.4564  | 38.7685  | 39.1502  | 39.5047  |
| 97.5% | 52.6759 | 53.5879  | 54.3144  | 55.1296  | 56.0853  | 57.0378  | 57.9907  | 58.8424  | 59.6071  | 60.2578  |
| 99%   | 78.1346 | 79.4559  | 80.8921  | 81.9438  | 83.4831  | 84.9107  | 86.5330  | 88.0430  | 90.0311  | 91.8491  |
| 99.5% | 99.1122 | 101.2551 | 104.0530 | 106.3319 | 108.3138 | 110.8009 | 112.9560 | 114.9378 | 116.9578 | 119.0231 |

Table 18: Fixed-b critical values for t-test in regression with intercept and 4 regressors for the Parzen kernel (Upper tail).

## 2.2 Wald Test

|       | 0.02      | 0.04      | 0.06      | 0.08      | 0.10      | 0.12      | 0.14      | 0.16      | 0.18      | 0.20      |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 90%   | 2.7804    | 3.1240    | 3.5222    | 3.9976    | 4.5511    | 5.2087    | 6.0010    | 6.9353    | 8.0480    | 9.3180    |
| 95%   | 3.9853    | 4.4929    | 5.1061    | 5.8480    | 6.7368    | 7.8070    | 9.0865    | 10.5815   | 12.3756   | 14.5126   |
| 97.5% | 5.2441    | 5.9437    | 6.7729    | 7.8491    | 9.0980    | 10.6816   | 12.5020   | 14.7509   | 17.5146   | 20.7523   |
| 99%   | 6.9706    | 8.0274    | 9.2682    | 10.7824   | 12.7006   | 15.0721   | 17.9046   | 21.3276   | 25.6326   | 31.0128   |
|       | 0.22      | 0.24      | 0.26      | 0.28      | 0.30      | 0.32      | 0.34      | 0.36      | 0.38      | 0.40      |
| 90%   | 10.8652   | 12.6583   | 14.7608   | 17.1019   | 19.8913   | 23.1347   | 26.7664   | 30.8963   | 35.5322   | 40.5009   |
| 95%   | 17.0524   | 20.1649   | 23.7580   | 27.9498   | 32.8621   | 38.5401   | 45.0003   | 52.1606   | 60.1547   | 68.9440   |
| 97.5% | 24.7837   | 29.6262   | 35.1009   | 41.8066   | 49.6484   | 58.5976   | 69.1919   | 80.7626   | 94.1614   | 109.1917  |
| 99%   | 37.6439   | 44.9839   | 54.2075   | 65.3918   | 78.5951   | 93.2687   | 110.2587  | 130.4439  | 152.5511  | 178.7375  |
|       | 0.42      | 0.44      | 0.46      | 0.48      | 0.50      | 0.52      | 0.54      | 0.56      | 0.58      | 0.60      |
| 90%   | 45.9586   | 51.5875   | 57.6855   | 64.3431   | 71.3888   | 78.9755   | 86.5200   | 94.0295   | 101.9829  | 109.8300  |
| 95%   | 79.0160   | 89.6617   | 101.5667  | 113.6833  | 126.7396  | 140.5825  | 154.8926  | 169.0174  | 183.8432  | 199.3564  |
| 97.5% | 124.6763  | 142.0976  | 160.5089  | 180.1672  | 201.2579  | 222.9012  | 246.8924  | 270.2360  | 293.7779  | 317.4242  |
| 99%   | 207.2506  | 235.6130  | 266.6202  | 296.9649  | 333.5131  | 370.9466  | 412.9808  | 452.6884  | 494.7911  | 540.4441  |
|       | 0.62      | 0.64      | 0.66      | 0.68      | 0.70      | 0.72      | 0.74      | 0.76      | 0.78      | 0.80      |
| 90%   | 117.9457  | 125.9250  | 133.6678  | 141.2523  | 148.8856  | 156.1956  | 163.4945  | 170.7231  | 178.0315  | 184.6429  |
| 95%   | 215.1955  | 230.5376  | 245.5382  | 259.0278  | 274.8311  | 289.1890  | 301.5787  | 316.0362  | 329.5934  | 343.8381  |
| 97.5% | 343.3879  | 368.3567  | 393.2221  | 417.7791  | 442.7808  | 470.6322  | 496.6146  | 522.7419  | 550.7747  | 579.0197  |
| 99%   | 585.6525  | 629.5132  | 674.1926  | 713.2381  | 754.2916  | 796.9507  | 841.5005  | 885.2683  | 930.9702  | 981.5971  |
|       | 0.82      | 0.84      | 0.86      | 0.88      | 0.90      | 0.92      | 0.94      | 0.96      | 0.98      | 1.00      |
| 90%   | 191.8443  | 197.7109  | 203.8467  | 209.6394  | 215.1959  | 221.6721  | 226.9806  | 232.4918  | 238.2527  | 243.7448  |
| 95%   | 358.5122  | 370.8009  | 383.1618  | 396.4135  | 410.0882  | 422.7322  | 437.2133  | 449.4136  | 462.0619  | 474.9362  |
| 97.5% | 601.9104  | 625.1725  | 650.0562  | 673.9387  | 699.7179  | 725.6639  | 746.8907  | 770.6628  | 793.1088  | 818.9227  |
| 99%   | 1029.4028 | 1080.1359 | 1131.8364 | 1175.6603 | 1228.9534 | 1285.5301 | 1343.3019 | 1390.8856 | 1439.1434 | 1488.4843 |

Table 19: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 1 regressors for the Parzen kernel.

|       | 0.02      | 0.04      | 0.06      | 0.08      | 0.10      | 0.12      | 0.14      | 0.16      | 0.18      | 0.20      |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 90%   | 2.9465    | 3.5738    | 4.3733    | 5.4380    | 6.7993    | 8.5469    | 10.8107   | 13.8066   | 17.6170   | 22.3970   |
| 95%   | 4.1955    | 5.1278    | 6.3635    | 7.9735    | 10.1111   | 12.8813   | 16.4798   | 21.1606   | 27.3422   | 35.2141   |
| 97.5% | 5.5287    | 6.7741    | 8.4830    | 10.7162   | 13.7417   | 17.7491   | 23.1757   | 30.2647   | 39.3385   | 51.3395   |
| 99%   | 7.2919    | 9.1098    | 11.4566   | 14.7407   | 19.2215   | 25.1443   | 33.2909   | 44.4080   | 59.4423   | 78.7776   |
|       | 0.22      | 0.24      | 0.26      | 0.28      | 0.30      | 0.32      | 0.34      | 0.36      | 0.38      | 0.40      |
| 90%   | 28.3924   | 35.6760   | 44.4931   | 55.2592   | 67.5454   | 81.1573   | 96.4436   | 112.6358  | 129.5279  | 146.9035  |
| 95%   | 45.3121   | 57.8446   | 73.1021   | 91.7817   | 112.9453  | 136.3593  | 162.2755  | 190.7371  | 219.6878  | 250.7720  |
| 97.5% | 66.9598   | 86.4414   | 109.9258  | 137.8634  | 171.8132  | 208.7466  | 249.9448  | 294.8409  | 345.1716  | 395.1403  |
| 99%   | 102.4809  | 133.3420  | 172.6268  | 218.0676  | 274.6099  | 336.9977  | 404.1758  | 479.9935  | 560.0853  | 640.9173  |
|       | 0.42      | 0.44      | 0.46      | 0.48      | 0.50      | 0.52      | 0.54      | 0.56      | 0.58      | 0.60      |
| 90%   | 164.2829  | 181.8492  | 199.2878  | 216.2593  | 232.5746  | 248.0091  | 263.4899  | 278.5046  | 293.1470  | 307.5029  |
| 95%   | 283.2112  | 314.2439  | 346.8027  | 378.1937  | 410.0436  | 441.9981  | 470.6452  | 502.7421  | 533.5115  | 563.6552  |
| 97.5% | 448.0707  | 495.5924  | 548.9186  | 602.7492  | 654.7298  | 705.0957  | 757.5092  | 811.4977  | 861.5965  | 911.9905  |
| 99%   | 727.1153  | 817.9390  | 897.0372  | 983.0961  | 1067.6433 | 1169.8180 | 1255.6796 | 1346.0993 | 1442.8980 | 1525.7431 |
|       | 0.62      | 0.64      | 0.66      | 0.68      | 0.70      | 0.72      | 0.74      | 0.76      | 0.78      | 0.80      |
| 90%   | 321.5741  | 336.1360  | 350.7591  | 365.0580  | 378.1819  | 392.0296  | 407.3809  | 423.3639  | 437.8646  | 451.9186  |
| 95%   | 591.7863  | 623.1035  | 650.7728  | 679.3483  | 712.7127  | 745.7127  | 778.3685  | 807.6755  | 840.1581  | 876.3821  |
| 97.5% | 965.9334  | 1021.1702 | 1073.2063 | 1131.0899 | 1186.1426 | 1257.4115 | 1320.6240 | 1378.7117 | 1440.3584 | 1506.7861 |
| 99%   | 1623.7625 | 1719.6258 | 1813.3882 | 1914.0838 | 2025.5460 | 2115.3965 | 2235.7962 | 2386.7715 | 2526.4248 | 2670.4828 |
|       | 0.82      | 0.84      | 0.86      | 0.88      | 0.90      | 0.92      | 0.94      | 0.96      | 0.98      | 1.00      |
| 90%   | 466.1710  | 479.3762  | 495.0824  | 509.0514  | 526.3737  | 539.3853  | 555.1760  | 569.7953  | 584.3551  | 598.8233  |
| 95%   | 911.6093  | 947.2195  | 980.7838  | 1020.8265 | 1065.3611 | 1099.7534 | 1132.2657 | 1168.4542 | 1206.9718 | 1248.4153 |
| 97.5% | 1581.9180 | 1647.6749 | 1718.0087 | 1779.6722 | 1850.6978 | 1930.3315 | 2004.4409 | 2077.9820 | 2156.3968 | 2243.5944 |
| 99%   | 2796.8447 | 2929.1924 | 3083.8307 | 3216.7357 | 3331.8448 | 3486.5715 | 3664.7330 | 3827.9363 | 3978.4279 | 4141.9935 |

Table 20: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 2 regressors for the Parzen kernel.

|       | 0.02      | 0.04      | 0.06      | 0.08      | 0.10      | 0.12      | 0.14      | 0.16      | 0.18      | 0.20      |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 90%   | 5.0109    | 6.1365    | 7.5685    | 9.4725    | 11.9865   | 15.2078   | 19.4285   | 24.9910   | 32.1916   | 41.3839   |
| 95%   | 6.6064    | 8.1316    | 10.1790   | 12.9248   | 16.5204   | 21.2047   | 27.5116   | 35.8474   | 46.6610   | 60.5926   |
| 97.5% | 8.2210    | 10.2376   | 12.9695   | 16.5910   | 21.5932   | 27.9868   | 36.6342   | 48.4050   | 64.2309   | 84.4976   |
| 99%   | 10.4223   | 12.9899   | 16.6878   | 21.7268   | 28.5874   | 38.2133   | 51.2369   | 68.9671   | 93.0926   | 124.6673  |
|       | 0.22      | 0.24      | 0.26      | 0.28      | 0.30      | 0.32      | 0.34      | 0.36      | 0.38      | 0.40      |
| 90%   | 52.9732   | 67.2859   | 84.5851   | 105.5130  | 129.4702  | 156.2331  | 186.4275  | 218.1601  | 252.1580  | 285.7359  |
| 95%   | 78.5067   | 100.7347  | 127.8616  | 160.8571  | 198.9615  | 242.3662  | 291.4216  | 342.6030  | 396.1278  | 453.2975  |
| 97.5% | 110.7592  | 143.5216  | 184.5805  | 232.7022  | 287.0203  | 349.9433  | 422.2224  | 497.3178  | 583.8763  | 669.0582  |
| 99%   | 164.1143  | 212.6974  | 273.9266  | 347.7994  | 436.7961  | 532.8241  | 640.1987  | 760.2157  | 878.5245  | 1011.2994 |
|       | 0.42      | 0.44      | 0.46      | 0.48      | 0.50      | 0.52      | 0.54      | 0.56      | 0.58      | 0.60      |
| 90%   | 320.5630  | 356.4535  | 391.2671  | 425.3217  | 460.2232  | 494.9161  | 526.4381  | 556.4843  | 587.6318  | 617.8752  |
| 95%   | 512.3505  | 573.0129  | 634.5545  | 694.9314  | 752.9409  | 811.8210  | 869.7852  | 927.5108  | 987.3966  | 1039.1219 |
| 97.5% | 759.1240  | 848.8992  | 938.1814  | 1030.3200 | 1119.9760 | 1219.7968 | 1307.6690 | 1401.2570 | 1496.2459 | 1586.1460 |
| 99%   | 1156.7782 | 1304.8702 | 1444.8400 | 1616.2346 | 1777.5690 | 1926.8133 | 2066.1968 | 2230.6995 | 2389.2552 | 2545.3964 |
|       | 0.62      | 0.64      | 0.66      | 0.68      | 0.70      | 0.72      | 0.74      | 0.76      | 0.78      | 0.80      |
| 90%   | 649.8913  | 678.8954  | 710.9553  | 742.1820  | 772.4468  | 804.3009  | 835.6857  | 867.7018  | 902.4318  | 936.0141  |
| 95%   | 1101.2721 | 1160.8747 | 1218.3476 | 1278.4820 | 1348.1590 | 1412.1489 | 1483.1855 | 1545.8027 | 1622.0647 | 1691.3237 |
| 97.5% | 1688.9412 | 1778.6164 | 1883.8883 | 1988.4915 | 2101.4144 | 2220.6621 | 2335.2113 | 2470.4817 | 2595.3394 | 2737.3850 |
| 99%   | 2710.1624 | 2860.7342 | 3065.8995 | 3264.7113 | 3469.2046 | 3655.3305 | 3857.3939 | 4031.5020 | 4270.3357 | 4520.9405 |
|       | 0.82      | 0.84      | 0.86      | 0.88      | 0.90      | 0.92      | 0.94      | 0.96      | 0.98      | 1.00      |
| 90%   | 970.8034  | 1005.5790 | 1037.2196 | 1073.9639 | 1111.0873 | 1147.3186 | 1183.0600 | 1216.3601 | 1251.2119 | 1286.5386 |
| 95%   | 1769.4254 | 1848.8465 | 1928.6621 | 2003.0674 | 2075.1919 | 2150.5710 | 2223.7714 | 2318.5201 | 2410.4017 | 2485.6697 |
| 97.5% | 2860.5686 | 2989.5116 | 3137.5443 | 3289.2655 | 3441.7426 | 3586.1836 | 3752.6491 | 3904.2701 | 4049.9320 | 4208.2980 |
| 99%   | 4746.4437 | 4988.7219 | 5259.3987 | 5572.1061 | 5856.7953 | 6140.9190 | 6372.2961 | 6649.3639 | 6918.4484 | 7260.9376 |

Table 21: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and 2 regressors for the Parzen kernel.

|       | 0.02      | 0.04      | 0.06      | 0.08      | 0.10      | 0.12      | 0.14      | 0.16      | 0.18      | 0.20      |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 90%   | 3.1315    | 4.1115    | 5.4948    | 7.4433    | 10.2425   | 14.2393   | 19.8963   | 27.8026   | 38.4748   | 52.5143   |
| 95%   | 4.4754    | 5.9282    | 8.0355    | 11.0011   | 15.3203   | 21.6455   | 30.7286   | 43.5413   | 61.1382   | 83.9465   |
| 97.5% | 5.9537    | 7.9640    | 10.8083   | 15.0224   | 21.2937   | 30.5427   | 43.7541   | 62.6939   | 89.2437   | 124.6654  |
| 99%   | 7.8941    | 10.6364   | 14.8160   | 21.0448   | 30.2713   | 43.9358   | 64.1117   | 93.4424   | 133.9301  | 188.7539  |
|       | 0.22      | 0.24      | 0.26      | 0.28      | 0.30      | 0.32      | 0.34      | 0.36      | 0.38      | 0.40      |
| 90%   | 70.1687   | 91.5601   | 116.4687  | 144.0890  | 174.1041  | 204.0529  | 235.1211  | 262.7916  | 291.9510  | 319.9344  |
| 95%   | 113.5211  | 150.0127  | 192.2313  | 238.3258  | 287.8329  | 339.9737  | 393.5554  | 445.8631  | 495.5686  | 542.3851  |
| 97.5% | 169.3959  | 223.5488  | 284.8504  | 355.5738  | 428.5243  | 511.0792  | 589.5370  | 673.6823  | 756.8803  | 841.4580  |
| 99%   | 258.3757  | 340.5761  | 441.3717  | 555.6187  | 677.2033  | 812.8797  | 939.8265  | 1074.5382 | 1212.8155 | 1334.3881 |
|       | 0.42      | 0.44      | 0.46      | 0.48      | 0.50      | 0.52      | 0.54      | 0.56      | 0.58      | 0.60      |
| 90%   | 345.1121  | 369.5361  | 394.8979  | 419.4304  | 442.8757  | 467.2449  | 489.8530  | 514.3834  | 541.1988  | 566.9578  |
| 95%   | 595.9576  | 645.6356  | 693.2944  | 740.5752  | 794.0317  | 845.9478  | 898.1635  | 950.8060  | 1010.1136 | 1074.1093 |
| 97.5% | 927.3917  | 1010.5628 | 1090.3021 | 1182.7145 | 1271.3923 | 1356.8032 | 1454.4168 | 1553.0825 | 1659.5918 | 1758.9437 |
| 99%   | 1479.0751 | 1654.0667 | 1794.2782 | 1942.0365 | 2109.8956 | 2266.0457 | 2457.1091 | 2643.9366 | 2849.7222 | 3067.2434 |
|       | 0.62      | 0.64      | 0.66      | 0.68      | 0.70      | 0.72      | 0.74      | 0.76      | 0.78      | 0.80      |
| 90%   | 594.1626  | 619.0536  | 645.5328  | 671.0010  | 696.4637  | 724.5989  | 751.0024  | 777.9925  | 804.7293  | 830.8355  |
| 95%   | 1130.3738 | 1193.8414 | 1254.3064 | 1319.5197 | 1389.7590 | 1459.1910 | 1524.8738 | 1598.2604 | 1668.2117 | 1732.0378 |
| 97.5% | 1861.6864 | 1972.1198 | 2105.8767 | 2238.1491 | 2376.6888 | 2501.0982 | 2633.8119 | 2771.3630 | 2900.3698 | 3041.9681 |
| 99%   | 3286.4806 | 3507.4222 | 3738.2040 | 3992.0699 | 4213.3232 | 4441.5059 | 4716.1936 | 4978.9039 | 5256.6646 | 5546.9616 |
|       | 0.82      | 0.84      | 0.86      | 0.88      | 0.90      | 0.92      | 0.94      | 0.96      | 0.98      | 1.00      |
| 90%   | 855.1786  | 880.4901  | 905.0888  | 929.5693  | 951.9946  | 974.4709  | 992.0546  | 1015.5035 | 1036.2697 | 1058.9480 |
| 95%   | 1796.7958 | 1854.9959 | 1927.0292 | 2006.8823 | 2073.7697 | 2148.1475 | 2220.7460 | 2285.5729 | 2352.6848 | 2421.6392 |
| 97.5% | 3192.3330 | 3339.0480 | 3483.0899 | 3638.1149 | 3766.3124 | 3906.2880 | 4049.4209 | 4216.3043 | 4367.2825 | 4529.7957 |
| 99%   | 5831.3869 | 6088.6413 | 6369.8042 | 6663.0044 | 6916.3955 | 7246.3176 | 7576.1423 | 7972.8482 | 8260.4865 | 8597.6057 |

Table 22: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 3 regressors for the Parzen kernel.

|       | 0.02      | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 5.3638    | 7.1145     | 9.5997     | 13.1589    | 18.2898    | 25.6551    | 36.1692    | 51.0369    | 71.1427    | 97.4825    |
| 95%   | 7.0911    | 9.4591     | 12.8444    | 17.9374    | 25.3283    | 36.0234    | 51.5829    | 73.9980    | 105.0363   | 146.3481   |
| 97.5% | 8.8719    | 11.9122    | 16.4541    | 23.1237    | 33.0041    | 47.7737    | 69.4572    | 101.0163   | 144.5534   | 203.7487   |
| 99%   | 11.1582   | 15.2699    | 21.4876    | 30.4382    | 44.3437    | 65.6123    | 97.7339    | 143.7475   | 208.9784   | 294.0270   |
|       | 0.22      | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 131.6766  | 172.7124   | 220.8384   | 275.0980   | 332.7220   | 394.1271   | 453.4114   | 512.8152   | 569.8740   | 625.8544   |
| 95%   | 199.6983  | 264.2876   | 338.8354   | 423.2713   | 517.0288   | 612.5307   | 709.6450   | 809.5396   | 899.7185   | 993.6257   |
| 97.5% | 279.4005  | 371.3508   | 481.4521   | 604.2595   | 736.2464   | 872.6714   | 1015.6716  | 1158.2570  | 1302.8660  | 1455.1057  |
| 99%   | 407.8816  | 541.4170   | 703.0133   | 883.0576   | 1085.2871  | 1291.4678  | 1499.3532  | 1719.0403  | 1928.8862  | 2178.2835  |
|       | 0.42      | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 682.8091  | 736.3971   | 790.0341   | 843.4591   | 896.3855   | 953.3984   | 1012.0956  | 1068.1962  | 1126.6708  | 1188.3289  |
| 95%   | 1087.8695 | 1181.9876  | 1279.2841  | 1383.7893  | 1489.8212  | 1600.1523  | 1713.1051  | 1821.1056  | 1940.7666  | 2057.6860  |
| 97.5% | 1599.0144 | 1751.3665  | 1905.3252  | 2061.5420  | 2228.1658  | 2394.5856  | 2576.6370  | 2772.9663  | 2964.6833  | 3173.3313  |
| 99%   | 2410.0804 | 2631.4235  | 2859.9299  | 3129.7747  | 3419.3808  | 3731.7629  | 4007.9015  | 4340.6407  | 4685.6508  | 5003.0242  |
|       | 0.62      | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 1244.6684 | 1309.1250  | 1371.0034  | 1436.8876  | 1497.8417  | 1564.5255  | 1630.3866  | 1701.6918  | 1762.9565  | 1829.3607  |
| 95%   | 2178.8222 | 2310.2427  | 2447.5564  | 2578.6015  | 2725.8674  | 2867.0588  | 2997.0683  | 3136.0148  | 3287.4671  | 3445.4437  |
| 97.5% | 3364.0610 | 3601.9271  | 3840.3897  | 4092.0082  | 4363.3762  | 4597.0894  | 4835.0648  | 5118.0928  | 5405.7298  | 5659.5616  |
| 99%   | 5349.5411 | 5774.9032  | 6222.0000  | 6612.1024  | 6984.8544  | 7419.4617  | 7859.2747  | 8354.3337  | 8860.7312  | 9428.9157  |
|       | 0.82      | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 1896.1249 | 1957.4507  | 2021.4877  | 2084.9747  | 2145.5579  | 2205.4693  | 2264.7324  | 2327.0062  | 2383.4411  | 2439.5143  |
| 95%   | 3605.2955 | 3773.2852  | 3932.9996  | 4085.2581  | 4238.7124  | 4392.1499  | 4539.7369  | 4696.9030  | 4842.9615  | 5004.5920  |
| 97.5% | 5927.9815 | 6194.0549  | 6497.9018  | 6822.4839  | 7096.3628  | 7381.3214  | 7679.3482  | 8003.7768  | 8319.8007  | 8596.9860  |
| 99%   | 9932.9229 | 10462.8207 | 11042.0519 | 11500.3533 | 12065.3175 | 12655.9119 | 13191.6698 | 13859.2675 | 14367.0170 | 14843.1638 |

Table 23: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and 3 regressors for the Parzen kernel.



|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 7.3249     | 9.7093     | 13.1282    | 18.0932    | 25.3132    | 35.7577    | 50.7441    | 71.9245    | 100.8013   | 138.9109   |
| 95%   | 9.2676     | 12.3832    | 17.0128    | 23.8592    | 33.8764    | 48.5860    | 70.2267    | 100.9429   | 143.9009   | 200.7789   |
| 97.5% | 11.1971    | 15.2588    | 21.1626    | 29.8987    | 43.1501    | 63.2729    | 92.5931    | 134.2655   | 193.2108   | 272.6579   |
| 99%   | 13.8068    | 18.9048    | 26.6919    | 38.7263    | 57.3730    | 85.3542    | 127.2961   | 188.9446   | 275.0010   | 389.3382   |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 187.8581   | 247.6693   | 317.8888   | 398.2825   | 482.6907   | 570.7330   | 661.1760   | 750.3544   | 838.1834   | 923.4376   |
| 95%   | 273.8420   | 364.2560   | 466.9957   | 587.4089   | 716.2830   | 849.5385   | 989.8302   | 1125.7219  | 1262.7564  | 1399.3077  |
| 97.5% | 373.4510   | 498.9378   | 646.1947   | 809.9731   | 987.0001   | 1180.1010  | 1375.0346  | 1571.3056  | 1761.0947  | 1967.3075  |
| 99%   | 539.5478   | 723.5220   | 932.5521   | 1168.2391  | 1415.3509  | 1688.3415  | 1988.0855  | 2292.8926  | 2586.2236  | 2890.8194  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 1005.2213  | 1085.9318  | 1166.4426  | 1246.3002  | 1331.3422  | 1418.4399  | 1503.7994  | 1596.3657  | 1690.7248  | 1795.3362  |
| 95%   | 1537.7173  | 1679.1455  | 1824.2712  | 1964.6201  | 2104.3119  | 2254.3211  | 2411.1312  | 2583.0161  | 2750.7998  | 2932.0220  |
| 97.5% | 2166.7880  | 2391.7857  | 2593.4936  | 2820.3728  | 3045.8723  | 3285.5409  | 3511.0855  | 3785.0960  | 4066.0555  | 4359.7652  |
| 99%   | 3180.5689  | 3532.4906  | 3854.2005  | 4236.2088  | 4593.2348  | 5003.0258  | 5414.9419  | 5886.7128  | 6342.1303  | 6753.4773  |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 1894.1472  | 1996.2252  | 2098.2687  | 2209.7365  | 2311.2380  | 2419.0329  | 2524.2999  | 2620.8056  | 2727.2721  | 2822.4102  |
| 95%   | 3117.8705  | 3322.1920  | 3519.3591  | 3736.0512  | 3968.2047  | 4188.7462  | 4406.2725  | 4633.5346  | 4865.5443  | 5128.5827  |
| 97.5% | 4696.8674  | 5022.9916  | 5337.6727  | 5696.3351  | 6043.0707  | 6394.5505  | 6791.4581  | 7144.1989  | 7558.4524  | 8000.1453  |
| 99%   | 7298.1372  | 7815.6987  | 8487.4315  | 9037.6995  | 9566.3632  | 10176.0936 | 10878.4799 | 11493.8530 | 12168.7263 | 12861.4257 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 2943.3679  | 3058.9226  | 3166.7883  | 3263.5060  | 3358.5443  | 3457.8069  | 3564.4338  | 3660.4625  | 3750.6717  | 3846.3681  |
| 95%   | 5359.5596  | 5585.7032  | 5821.7866  | 6051.2833  | 6276.4750  | 6477.6942  | 6700.1942  | 6962.4328  | 7237.0695  | 7478.2524  |
| 97.5% | 8409.2055  | 8835.7910  | 9278.0177  | 9738.6891  | 10191.2775 | 10644.1979 | 11057.1761 | 11509.1217 | 11900.4337 | 12344.2728 |
| 99%   | 13632.3780 | 14375.0405 | 15087.1740 | 15897.8656 | 16803.1620 | 17512.7737 | 18297.7863 | 19143.7092 | 19940.2408 | 20926.8175 |

Table 24: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and 3 regressors for the Parzen kernel.

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 3.3259     | 4.7408     | 6.9551     | 10.4201    | 15.8379    | 24.2320    | 36.8897    | 55.2214    | 79.7846    | 110.8888   |
| 95%   | 4.7721     | 6.8780     | 10.1962    | 15.4257    | 23.8802    | 37.0088    | 57.1522    | 86.0710    | 126.5605   | 178.1983   |
| 97.5% | 6.3100     | 9.1603     | 13.6635    | 21.0601    | 32.8410    | 51.7577    | 81.1808    | 124.6214   | 183.4085   | 260.4930   |
| 99%   | 8.3969     | 12.4022    | 18.8193    | 29.5308    | 47.1197    | 75.0003    | 120.3237   | 186.9506   | 276.2564   | 388.4069   |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 148.3655   | 189.1337   | 232.4439   | 275.1020   | 317.2155   | 357.3408   | 392.9734   | 428.4669   | 465.0529   | 499.5790   |
| 95%   | 239.4244   | 308.5353   | 381.4849   | 454.2273   | 527.2074   | 598.1394   | 666.3936   | 731.9098   | 804.0705   | 874.3984   |
| 97.5% | 351.7095   | 454.5145   | 567.1493   | 682.0627   | 795.0133   | 909.5725   | 1025.3915  | 1145.5199  | 1267.5549  | 1392.8364  |
| 99%   | 532.3879   | 697.6466   | 869.8037   | 1057.7267  | 1244.2960  | 1427.4269  | 1613.5305  | 1831.2591  | 2053.3832  | 2271.7688  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 534.0053   | 571.1843   | 611.8950   | 651.4510   | 690.1074   | 730.3463   | 773.3085   | 815.2675   | 854.3450   | 894.4566   |
| 95%   | 952.8580   | 1030.7448  | 1114.6610  | 1199.3589  | 1286.8272  | 1375.5739  | 1469.8423  | 1562.3353  | 1662.6350  | 1757.7480  |
| 97.5% | 1517.4550  | 1651.7561  | 1790.7265  | 1942.3839  | 2116.0663  | 2282.2540  | 2458.8818  | 2646.6199  | 2844.6822  | 3023.2839  |
| 99%   | 2516.7935  | 2771.9740  | 3060.2771  | 3280.8808  | 3569.7926  | 3877.6913  | 4177.5579  | 4561.5930  | 4900.6280  | 5294.9876  |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 933.1763   | 972.4308   | 1010.9575  | 1047.7016  | 1085.3049  | 1123.0815  | 1158.5175  | 1195.3384  | 1231.1436  | 1266.5995  |
| 95%   | 1863.5433  | 1966.5322  | 2075.4580  | 2171.2652  | 2277.9725  | 2378.0927  | 2483.6326  | 2584.3467  | 2690.0014  | 2790.3200  |
| 97.5% | 3220.5767  | 3414.0456  | 3632.5114  | 3849.5201  | 4055.1053  | 4226.2108  | 4462.8825  | 4664.9325  | 4922.5770  | 5101.7739  |
| 99%   | 5657.7442  | 6049.5944  | 6413.1744  | 6877.5829  | 7297.4360  | 7770.5491  | 8271.4230  | 8712.7070  | 9157.5573  | 9670.6785  |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 1301.0985  | 1334.1133  | 1367.2307  | 1399.6233  | 1428.0665  | 1454.6368  | 1479.5131  | 1509.4643  | 1536.7343  | 1561.1650  |
| 95%   | 2889.7162  | 2982.8764  | 3090.8136  | 3187.3479  | 3277.4779  | 3386.8294  | 3491.7567  | 3577.8604  | 3659.4235  | 3759.0119  |
| 97.5% | 5339.1075  | 5600.9134  | 5826.8059  | 6031.5876  | 6293.9352  | 6504.2869  | 6737.2208  | 6947.9699  | 7178.5519  | 7366.3499  |
| 99%   | 10096.9515 | 10585.1723 | 11151.4639 | 11681.4273 | 12110.2358 | 12609.0743 | 13256.1731 | 13798.3465 | 14255.3435 | 14877.5099 |

Table 25: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 4 regressors for the Parzen kernel.

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 5.7331     | 8.2515     | 12.1529    | 18.3749    | 28.2976    | 43.6704    | 67.2152    | 101.5258   | 148.6420   | 209.1933   |
| 95%   | 7.5685     | 11.0031    | 16.4905    | 25.2425    | 39.4402    | 61.8784    | 96.9086    | 147.8030   | 218.4143   | 309.6646   |
| 97.5% | 9.4342     | 13.8801    | 21.0372    | 32.8188    | 51.9504    | 82.7785    | 130.9564   | 202.5709   | 303.1001   | 433.4309   |
| 99%   | 11.8850    | 17.8229    | 27.5176    | 43.4898    | 70.7047    | 115.8197   | 185.2404   | 287.6260   | 428.0435   | 610.6667   |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 281.8962   | 365.1186   | 450.5720   | 536.8839   | 622.4687   | 700.6811   | 776.9350   | 860.0529   | 940.0356   | 1019.7127  |
| 95%   | 419.4629   | 541.5101   | 677.0436   | 812.9601   | 945.6230   | 1077.5340  | 1211.3523  | 1337.7932  | 1467.7261  | 1611.3158  |
| 97.5% | 587.1240   | 759.5319   | 946.2263   | 1139.1675  | 1332.3393  | 1516.5265  | 1710.4677  | 1910.3024  | 2129.4665  | 2341.4342  |
| 99%   | 834.1305   | 1085.8111  | 1368.7687  | 1663.3575  | 1941.8481  | 2241.2723  | 2554.1388  | 2846.7588  | 3152.3489  | 3512.7530  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 1105.0807  | 1191.9448  | 1280.9719  | 1371.8081  | 1469.3089  | 1569.4537  | 1670.6615  | 1770.1708  | 1866.5349  | 1972.3462  |
| 95%   | 1766.1800  | 1923.0263  | 2094.6958  | 2278.3490  | 2464.7218  | 2644.8563  | 2842.7892  | 3033.9168  | 3233.6285  | 3441.8969  |
| 97.5% | 2564.4248  | 2815.1004  | 3077.3341  | 3357.1594  | 3645.2301  | 3959.7815  | 4285.0974  | 4636.1592  | 5023.7201  | 5376.2433  |
| 99%   | 3890.9546  | 4292.7563  | 4718.0789  | 5231.3531  | 5707.5762  | 6261.3542  | 6911.7389  | 7458.9218  | 8070.2036  | 8627.1298  |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 2068.5274  | 2175.0340  | 2275.6242  | 2374.1450  | 2469.1382  | 2564.4879  | 2663.2118  | 2747.3340  | 2838.7117  | 2941.5981  |
| 95%   | 3667.3148  | 3890.3069  | 4100.0148  | 4289.9136  | 4541.6084  | 4783.1608  | 5037.0069  | 5272.9135  | 5510.6178  | 5742.8789  |
| 97.5% | 5724.7983  | 6120.7998  | 6521.5344  | 6934.9147  | 7355.6182  | 7731.3526  | 8123.8055  | 8578.2969  | 9057.1877  | 9549.0233  |
| 99%   | 9338.9442  | 9941.8176  | 10558.2660 | 11196.3498 | 11956.6080 | 12705.7705 | 13562.5202 | 14278.9876 | 15080.3731 | 16114.1479 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 3029.8158  | 3108.2874  | 3194.6025  | 3284.0609  | 3371.3120  | 3451.8382  | 3523.9659  | 3606.2926  | 3691.9668  | 3765.7631  |
| 95%   | 5986.6062  | 6207.7505  | 6408.5705  | 6642.1403  | 6887.7427  | 7112.0426  | 7333.8994  | 7585.3971  | 7859.4044  | 8100.1016  |
| 97.5% | 10049.7512 | 10496.4341 | 11005.2600 | 11480.4652 | 11931.0317 | 12406.4910 | 12943.4549 | 13400.3048 | 13839.6539 | 14383.3069 |
| 99%   | 16914.5347 | 17855.5154 | 18550.3146 | 19351.9489 | 20224.1225 | 21258.5695 | 22190.3931 | 23182.3027 | 24161.5381 | 25112.0104 |

Table 26: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and 4 regressors for the Parzen kernel.

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 7.7642     | 11.1742    | 16.5943    | 25.2589    | 38.9419    | 60.5758    | 93.8142    | 142.5898   | 209.6726   | 295.9130   |
| 95%   | 9.8307     | 14.3851    | 21.5958    | 33.3853    | 52.5371    | 83.3292    | 131.3991   | 201.5262   | 298.6647   | 424.9380   |
| 97.5% | 11.9095    | 17.5727    | 27.0674    | 42.4582    | 67.8010    | 108.9986   | 174.7542   | 271.1768   | 404.1225   | 576.7770   |
| 99%   | 14.7303    | 22.0911    | 34.2581    | 55.1551    | 90.7100    | 148.8096   | 241.2215   | 378.6486   | 568.4102   | 805.1426   |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 398.8779   | 515.7203   | 638.1760   | 764.9588   | 888.6714   | 1011.0378  | 1121.9534  | 1232.8370  | 1353.0392  | 1474.9997  |
| 95%   | 576.8506   | 750.4554   | 929.2862   | 1114.1486  | 1305.4575  | 1486.4396  | 1671.0801  | 1868.2973  | 2055.3023  | 2268.7735  |
| 97.5% | 781.7042   | 1014.9201  | 1267.2117  | 1527.5487  | 1786.9551  | 2045.6744  | 2311.4856  | 2601.6264  | 2898.4056  | 3207.3174  |
| 99%   | 1097.5595  | 1408.5169  | 1759.0415  | 2126.8345  | 2501.8032  | 2896.3520  | 3308.9902  | 3761.8482  | 4212.4537  | 4693.0550  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 1597.7448  | 1730.1084  | 1869.8133  | 2006.9580  | 2158.3630  | 2308.4510  | 2462.9150  | 2618.3105  | 2780.5541  | 2941.4124  |
| 95%   | 2484.5127  | 2717.4040  | 2965.7304  | 3235.3574  | 3503.6973  | 3773.9559  | 4085.2862  | 4385.8555  | 4653.6876  | 4962.2255  |
| 97.5% | 3540.6421  | 3910.9267  | 4290.1468  | 4673.6373  | 5089.8572  | 5554.0674  | 5967.4313  | 6487.6969  | 6984.7565  | 7534.7458  |
| 99%   | 5157.8378  | 5690.4654  | 6333.9388  | 6971.3869  | 7605.8252  | 8260.1679  | 8996.7426  | 9816.3142  | 10640.1246 | 11412.0476 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 3092.8916  | 3242.2697  | 3394.2253  | 3545.2579  | 3711.0163  | 3855.4452  | 4010.6691  | 4175.5752  | 4333.3075  | 4484.6322  |
| 95%   | 5317.4004  | 5644.2609  | 5972.3542  | 6315.0722  | 6670.4399  | 7033.0364  | 7391.4411  | 7735.0033  | 8098.1247  | 8429.9305  |
| 97.5% | 8059.9980  | 8631.8684  | 9190.7092  | 9771.3213  | 10352.6256 | 10873.1254 | 11491.2336 | 12148.2644 | 12829.1367 | 13554.2858 |
| 99%   | 12361.3427 | 13220.1599 | 14171.8147 | 15212.4294 | 16149.4907 | 17243.8139 | 18305.1789 | 19228.9914 | 20362.9303 | 21552.8225 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 4632.2462  | 4776.6246  | 4913.2055  | 5050.0797  | 5193.6958  | 5324.7230  | 5447.9306  | 5580.4226  | 5691.4070  | 5808.0116  |
| 95%   | 8824.4915  | 9204.2921  | 9588.6793  | 9939.2381  | 10367.5446 | 10700.9078 | 11027.6065 | 11394.5299 | 11802.4338 | 12153.4967 |
| 97.5% | 14157.3363 | 14900.5459 | 15589.5531 | 16219.3524 | 16955.5836 | 17733.0411 | 18430.1234 | 19094.7880 | 19837.8723 | 20692.3677 |
| 99%   | 22793.8510 | 24220.4511 | 25475.0328 | 26613.5706 | 28090.9328 | 29380.0656 | 30565.2129 | 32044.2302 | 33540.8407 | 34987.7818 |

Table 27: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and 4 regressors for the Parzen kernel.

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 9.7295     | 14.0623    | 21.0014    | 32.1054    | 49.9320    | 78.0884    | 121.3358   | 185.9042   | 274.7075   | 388.8109   |
| 95%   | 12.0340    | 17.6635    | 26.5809    | 41.6887    | 66.0998    | 105.1035   | 166.8673   | 257.4812   | 382.2985   | 543.7497   |
| 97.5% | 14.3061    | 21.4062    | 32.8302    | 51.6842    | 83.2621    | 135.6108   | 216.1203   | 337.1432   | 506.3707   | 718.0935   |
| 99%   | 17.3691    | 26.0660    | 41.0920    | 65.9681    | 108.8104   | 180.2670   | 294.9801   | 461.8979   | 692.2006   | 992.7374   |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 525.0198   | 679.1318   | 843.9473   | 1011.1108  | 1178.8099  | 1342.6601  | 1496.1698  | 1657.6363  | 1822.6960  | 1985.7295  |
| 95%   | 741.6379   | 954.6176   | 1193.5001  | 1443.2884  | 1684.6605  | 1924.2679  | 2164.8874  | 2414.4556  | 2680.7816  | 2961.3862  |
| 97.5% | 974.2368   | 1275.0341  | 1592.9933  | 1925.6934  | 2265.6724  | 2605.7153  | 2960.7426  | 3299.6488  | 3690.3423  | 4093.0641  |
| 99%   | 1352.9317  | 1781.0946  | 2227.3711  | 2662.0104  | 3144.3820  | 3600.6714  | 4106.4087  | 4639.4307  | 5198.6378  | 5817.8534  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 2156.9261  | 2336.2364  | 2519.6385  | 2713.4556  | 2916.5722  | 3113.8326  | 3324.4331  | 3535.2036  | 3758.5626  | 3978.1525  |
| 95%   | 3244.2838  | 3573.1842  | 3912.0008  | 4257.0636  | 4606.8631  | 4985.0497  | 5377.8283  | 5772.9201  | 6171.2046  | 6606.5696  |
| 97.5% | 4491.2967  | 4970.2561  | 5479.9105  | 5996.2570  | 6567.7675  | 7184.3191  | 7789.5608  | 8425.4724  | 9095.6322  | 9816.3195  |
| 99%   | 6551.1035  | 7230.0768  | 7952.7728  | 8777.6998  | 9587.1462  | 10436.2666 | 11427.7387 | 12448.4302 | 13435.1871 | 14485.1897 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 4196.5955  | 4434.9255  | 4650.6919  | 4868.7963  | 5096.2473  | 5322.8099  | 5538.9665  | 5752.1538  | 5990.0315  | 6182.3344  |
| 95%   | 7054.1614  | 7518.2850  | 7993.0966  | 8438.3617  | 8922.9650  | 9386.5481  | 9870.4085  | 10380.2187 | 10894.5262 | 11364.8638 |
| 97.5% | 10512.3154 | 11247.7738 | 11907.2225 | 12703.1735 | 13457.2032 | 14251.8456 | 15097.3690 | 15937.7056 | 16790.3593 | 17728.2394 |
| 99%   | 15741.5474 | 17083.3593 | 18271.0009 | 19487.0326 | 20703.6863 | 22335.7267 | 23641.3112 | 25147.7710 | 26551.2266 | 27899.0048 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 6384.9811  | 6588.2684  | 6778.1692  | 6974.8901  | 7177.4612  | 7401.6739  | 7594.8169  | 7772.3374  | 7974.6236  | 8170.2584  |
| 95%   | 11862.9132 | 12394.8084 | 12888.1684 | 13378.0736 | 13890.6055 | 14395.2124 | 14906.3528 | 15437.9050 | 15908.2596 | 16413.9440 |
| 97.5% | 18714.8551 | 19651.1524 | 20496.0944 | 21563.8964 | 22477.6407 | 23440.2792 | 24360.8390 | 25397.3561 | 26433.2109 | 27265.0254 |
| 99%   | 29578.0943 | 31008.4683 | 32632.9664 | 34200.3076 | 35859.2804 | 37569.0305 | 39425.3314 | 41307.8949 | 43024.5796 | 44779.2912 |

Table 28: Fixed-b critical values for Wald test for 4 hypotheses in regression with intercept and 4 regressors for the Parzen kernel.

### 3 Quadratic Spectral Kernel (Intercept Only)

#### 3.1 t-Test

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 95%   | 1.7338   | 1.9209   | 2.1699   | 2.4856   | 2.8936   | 3.4082   | 4.0151   | 4.8014   | 5.7308   | 6.8305   |
| 97.5% | 2.0886   | 2.3448   | 2.6656   | 3.0945   | 3.6345   | 4.3537   | 5.2460   | 6.3794   | 7.7178   | 9.2666   |
| 99%   | 2.5234   | 2.8663   | 3.3071   | 3.8767   | 4.6549   | 5.7091   | 7.0310   | 8.6937   | 10.7070  | 13.1511  |
| 99.5% | 2.8407   | 3.2338   | 3.8202   | 4.5328   | 5.5177   | 6.8401   | 8.4881   | 10.8076  | 13.4736  | 16.4481  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 8.0140   | 9.2449   | 10.5013  | 11.7472  | 12.9608  | 14.0871  | 15.0642  | 16.0279  | 16.8018  | 17.5136  |
| 97.5% | 11.0222  | 12.8987  | 14.7963  | 16.8181  | 18.7732  | 20.7165  | 22.4850  | 24.0161  | 25.5221  | 26.8964  |
| 99%   | 15.8087  | 18.8405  | 21.8897  | 25.3523  | 28.6677  | 31.5962  | 34.5779  | 37.4654  | 40.2910  | 43.0964  |
| 99.5% | 19.9960  | 24.0370  | 28.0318  | 32.5506  | 36.7802  | 42.0681  | 46.7491  | 50.7974  | 55.0350  | 59.9235  |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 18.1475  | 18.7095  | 19.2702  | 19.7309  | 20.1433  | 20.5939  | 20.9625  | 21.3219  | 21.6411  | 21.9317  |
| 97.5% | 28.1398  | 29.2209  | 30.1876  | 31.0764  | 31.9833  | 32.7286  | 33.3458  | 34.0529  | 34.6470  | 35.2694  |
| 99%   | 45.7145  | 47.7651  | 50.4107  | 52.2371  | 53.9473  | 55.5799  | 57.1530  | 58.7989  | 60.3068  | 61.2087  |
| 99.5% | 63.5465  | 67.1811  | 70.8659  | 74.7957  | 77.7241  | 80.2765  | 82.1976  | 84.2852  | 86.3021  | 88.9058  |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 22.1648  | 22.4990  | 22.7303  | 22.9469  | 23.1772  | 23.4815  | 23.7279  | 23.9809  | 24.1831  | 24.4107  |
| 97.5% | 35.8575  | 36.3833  | 36.7923  | 37.3439  | 37.7349  | 38.3346  | 38.8993  | 39.3871  | 39.9879  | 40.3649  |
| 99%   | 62.7834  | 63.5792  | 64.7326  | 65.6511  | 66.8285  | 68.1831  | 68.6392  | 69.7165  | 70.7337  | 72.4124  |
| 99.5% | 91.1713  | 92.8712  | 95.3349  | 97.2121  | 98.6277  | 100.8720 | 103.7182 | 105.9101 | 107.6595 | 109.3739 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 24.6562  | 24.9178  | 25.1008  | 25.3928  | 25.5731  | 25.8380  | 26.0156  | 26.2197  | 26.3767  | 26.5555  |
| 97.5% | 41.0117  | 41.5149  | 42.0449  | 42.7282  | 43.3055  | 43.7696  | 44.3047  | 44.7995  | 45.2353  | 45.7322  |
| 99%   | 73.8060  | 74.9712  | 76.3487  | 77.8025  | 78.8081  | 80.1633  | 81.2284  | 82.3518  | 83.6382  | 84.7245  |
| 99.5% | 111.6043 | 112.2920 | 114.3376 | 115.9993 | 117.6093 | 120.4076 | 122.5280 | 124.1137 | 126.2646 | 127.9639 |

Table 29: Fixed-b critical values for t-test in regression with intercept and 1 regressors for the Quadratic Spectral kernel (Upper tail).

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 95%   | 1.8387   | 2.2179   | 2.7554   | 3.5262   | 4.6558   | 6.2499   | 8.2452   | 10.5867  | 13.0538  | 15.5822  |
| 97.5% | 2.2169   | 2.6989   | 3.3788   | 4.3942   | 5.9570   | 8.1722   | 10.9868  | 14.3270  | 18.2248  | 22.1221  |
| 99%   | 2.6543   | 3.2707   | 4.1906   | 5.6070   | 7.7643   | 10.9275  | 15.3929  | 20.5987  | 26.4262  | 32.4780  |
| 99.5% | 2.9695   | 3.6818   | 4.8148   | 6.5580   | 9.2596   | 13.3610  | 19.0458  | 25.8899  | 33.5541  | 41.7860  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 17.9215  | 20.0118  | 21.9040  | 23.2936  | 24.6416  | 25.8198  | 26.8105  | 27.6416  | 28.3236  | 28.8626  |
| 97.5% | 25.8737  | 29.4064  | 32.7209  | 35.5435  | 38.0199  | 40.0068  | 41.9382  | 43.4298  | 44.9925  | 46.2735  |
| 99%   | 38.5796  | 44.5772  | 50.9095  | 56.5940  | 62.1275  | 66.8679  | 71.6477  | 75.1193  | 78.5684  | 81.3288  |
| 99.5% | 52.2233  | 62.3790  | 70.9426  | 79.5688  | 88.5762  | 96.2031  | 104.4518 | 111.3683 | 117.2651 | 123.3460 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 29.3522  | 29.7868  | 30.1985  | 30.5747  | 31.0444  | 31.3895  | 31.8076  | 32.0786  | 32.3391  | 32.5972  |
| 97.5% | 47.4301  | 48.6974  | 49.8639  | 51.0984  | 52.1519  | 53.0226  | 53.7315  | 54.4280  | 54.9625  | 55.5455  |
| 99%   | 84.4173  | 86.9095  | 88.7172  | 91.0235  | 93.2422  | 95.1273  | 97.0613  | 98.9200  | 100.1921 | 101.5850 |
| 99.5% | 127.3676 | 131.7784 | 135.8046 | 139.6943 | 142.9155 | 145.3137 | 148.0093 | 150.0864 | 153.0373 | 156.2687 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 32.8148  | 33.0586  | 33.3087  | 33.5975  | 33.8363  | 34.0781  | 34.2574  | 34.4798  | 34.6259  | 34.7957  |
| 97.5% | 56.1534  | 56.6525  | 57.3157  | 57.8818  | 58.4784  | 58.8359  | 59.6114  | 60.0883  | 60.6984  | 61.2196  |
| 99%   | 103.0943 | 104.8352 | 106.7295 | 108.0105 | 109.9553 | 111.4894 | 112.7003 | 114.4283 | 116.3671 | 117.5233 |
| 99.5% | 159.2490 | 161.6297 | 164.4139 | 166.5152 | 168.3547 | 170.9474 | 173.0709 | 176.8185 | 179.8438 | 181.1092 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 35.0975  | 35.2390  | 35.4537  | 35.5664  | 35.7836  | 35.9691  | 36.1960  | 36.3131  | 36.3673  | 36.4647  |
| 97.5% | 61.7005  | 62.1025  | 62.6747  | 63.1938  | 63.6149  | 64.1992  | 64.6395  | 65.0456  | 65.4363  | 65.9789  |
| 99%   | 119.0481 | 120.7912 | 122.6463 | 124.2208 | 125.7212 | 127.0869 | 128.8392 | 130.8274 | 132.5765 | 134.3546 |
| 99.5% | 184.5576 | 187.0092 | 188.8724 | 192.8408 | 195.6083 | 198.4823 | 201.4315 | 203.3888 | 207.1061 | 210.2388 |

Table 30: Fixed-b critical values for t-test in regression with intercept and 2 regressors for the Quadratic Spectral kernel (Upper tail).

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 95%   | 1.9480   | 2.5657   | 3.5438   | 5.2077   | 7.7845   | 11.4042  | 15.5276  | 19.6657  | 23.2553  | 26.3876  |
| 97.5% | 2.3514   | 3.1202   | 4.4316   | 6.6604   | 10.2743  | 15.2291  | 21.0747  | 27.5537  | 33.8011  | 39.1404  |
| 99%   | 2.7868   | 3.8134   | 5.5863   | 8.6629   | 13.6483  | 20.7359  | 30.0470  | 39.9347  | 50.1987  | 60.4438  |
| 99.5% | 3.1222   | 4.3445   | 6.4086   | 10.1702  | 16.6331  | 26.0155  | 37.8295  | 51.9823  | 66.3197  | 79.7288  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 29.0080  | 31.0511  | 32.5221  | 33.7997  | 34.7396  | 35.6977  | 36.4965  | 37.2271  | 37.6956  | 38.2141  |
| 97.5% | 43.6657  | 47.5026  | 50.8290  | 53.4741  | 55.8035  | 57.7194  | 59.3947  | 60.7834  | 62.2190  | 63.6294  |
| 99%   | 69.3425  | 76.7819  | 84.3027  | 89.4150  | 94.8256  | 99.7228  | 102.7595 | 106.0204 | 109.2126 | 111.5165 |
| 99.5% | 92.8195  | 105.2094 | 115.2844 | 127.5405 | 135.0232 | 144.2302 | 152.4022 | 159.1581 | 164.9057 | 168.6872 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 38.5913  | 38.9545  | 39.3196  | 39.6373  | 40.0087  | 40.3193  | 40.5879  | 40.8605  | 41.0897  | 41.3106  |
| 97.5% | 64.7201  | 66.0546  | 66.9320  | 68.1213  | 68.8977  | 70.0711  | 70.9072  | 71.6486  | 72.4191  | 73.0344  |
| 99%   | 114.6272 | 118.2263 | 120.2267 | 123.0981 | 124.9827 | 127.4501 | 129.3687 | 131.3866 | 133.7834 | 135.8243 |
| 99.5% | 172.4843 | 176.3265 | 178.5818 | 182.5293 | 185.3262 | 189.5710 | 193.3980 | 196.1310 | 199.6192 | 201.9386 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 41.5992  | 41.7720  | 41.9504  | 42.1883  | 42.4203  | 42.6269  | 42.8509  | 43.0232  | 43.3037  | 43.4758  |
| 97.5% | 73.5297  | 74.2323  | 74.9267  | 75.4870  | 75.9990  | 76.3897  | 77.2284  | 77.9209  | 78.4182  | 79.0393  |
| 99%   | 137.7135 | 139.2162 | 140.7287 | 142.7240 | 144.5632 | 146.5387 | 148.0299 | 149.8361 | 151.4803 | 153.0798 |
| 99.5% | 204.7526 | 206.7694 | 210.6871 | 215.1211 | 218.2810 | 221.4989 | 224.6320 | 226.7299 | 229.3880 | 231.8486 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 43.6679  | 43.7612  | 43.9802  | 44.0576  | 44.3174  | 44.4963  | 44.5808  | 44.6676  | 44.7205  | 44.8445  |
| 97.5% | 79.5238  | 79.9386  | 80.4751  | 81.0272  | 81.7392  | 82.2778  | 82.8835  | 83.3242  | 83.6724  | 84.1447  |
| 99%   | 154.9991 | 156.8567 | 158.4612 | 160.9439 | 162.5394 | 164.9442 | 167.3881 | 168.9331 | 170.1249 | 172.0030 |
| 99.5% | 237.9535 | 242.9672 | 247.0913 | 249.7623 | 251.8437 | 255.0071 | 258.0828 | 261.1874 | 264.1901 | 267.7918 |

Table 31: Fixed-b critical values for t-test in regression with intercept and 3 regressors for the Quadratic Spectral kernel (Upper tail).



|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 95%   | 2.0755   | 2.9980   | 4.7367   | 8.0066   | 12.9502  | 18.7743  | 24.4489  | 29.1531  | 32.7229  | 35.2476  |
| 97.5% | 2.5039   | 3.6781   | 5.9764   | 10.3016  | 17.1442  | 25.7603  | 34.7186  | 42.4473  | 49.4636  | 54.3189  |
| 99%   | 2.9809   | 4.5049   | 7.5897   | 13.5930  | 23.2079  | 35.8468  | 50.2747  | 64.6779  | 77.0539  | 87.1792  |
| 99.5% | 3.3195   | 5.1412   | 8.8532   | 16.1635  | 28.2264  | 44.6931  | 63.9004  | 84.1229  | 101.8244 | 118.7531 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 37.3608  | 38.9765  | 40.1994  | 41.1792  | 42.0130  | 42.6609  | 43.3190  | 43.9753  | 44.4677  | 45.0558  |
| 97.5% | 58.2337  | 61.4007  | 63.9747  | 66.2668  | 68.0797  | 69.8522  | 71.4864  | 72.7222  | 74.1114  | 75.3708  |
| 99%   | 96.6635  | 103.9143 | 110.0281 | 114.3385 | 118.8693 | 122.8533 | 126.1582 | 129.3161 | 133.7230 | 136.7149 |
| 99.5% | 133.3465 | 144.6313 | 156.0616 | 165.8210 | 172.5383 | 179.8716 | 186.3915 | 191.9795 | 196.6340 | 201.5143 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 45.4182  | 45.8571  | 46.1817  | 46.6006  | 47.0160  | 47.2939  | 47.5043  | 47.7630  | 47.9664  | 48.1926  |
| 97.5% | 76.3155  | 77.6672  | 78.8015  | 79.9245  | 80.8727  | 81.6251  | 82.5219  | 83.1736  | 83.7716  | 84.3313  |
| 99%   | 140.2966 | 143.4031 | 145.7190 | 149.1056 | 151.3747 | 153.8304 | 156.1450 | 158.0567 | 159.5268 | 161.4543 |
| 99.5% | 205.2413 | 208.8258 | 213.8314 | 219.1599 | 224.2863 | 228.4088 | 230.7810 | 234.7518 | 238.8583 | 241.9464 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 48.4513  | 48.5651  | 48.6954  | 48.9004  | 49.0770  | 49.1956  | 49.3264  | 49.5959  | 49.7572  | 49.8293  |
| 97.5% | 85.0879  | 85.3835  | 85.6848  | 86.4106  | 87.1102  | 87.6513  | 88.1896  | 88.5629  | 88.9572  | 89.5650  |
| 99%   | 163.3022 | 165.1851 | 166.8757 | 168.0210 | 170.3218 | 171.8193 | 173.7461 | 175.1863 | 177.0365 | 178.9016 |
| 99.5% | 245.4369 | 248.8106 | 251.6587 | 254.5344 | 258.0548 | 262.0412 | 266.4086 | 271.6347 | 276.7294 | 281.0389 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 49.9342  | 50.2088  | 50.3347  | 50.4572  | 50.5668  | 50.6288  | 50.7612  | 50.8001  | 50.8836  | 51.0147  |
| 97.5% | 90.0440  | 90.4805  | 90.9523  | 91.4214  | 91.9677  | 92.4594  | 93.0514  | 93.5956  | 93.9991  | 94.4509  |
| 99%   | 181.8345 | 184.3641 | 185.7830 | 187.2245 | 189.4348 | 191.4908 | 193.5510 | 195.9634 | 198.2346 | 200.4918 |
| 99.5% | 285.1620 | 288.8403 | 290.9280 | 295.5790 | 298.7051 | 301.7266 | 305.0267 | 308.1684 | 312.4101 | 314.0904 |

Table 32: Fixed-b critical values for t-test in regression with intercept and 4 regressors for the Quadratic Spectral kernel (Upper tail).

### 3.2 Wald Test

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 3.0236     | 3.7473     | 4.7489     | 6.2040     | 8.3839     | 11.4700    | 16.1860    | 22.9666    | 32.6361    | 45.5334    |
| 95%   | 4.3442     | 5.4607     | 7.1219     | 9.4679     | 13.1136    | 18.6333    | 27.3211    | 40.3923    | 58.5291    | 84.4471    |
| 97.5% | 5.7412     | 7.3172     | 9.7230     | 13.3590    | 19.0887    | 28.3442    | 42.1720    | 63.7853    | 97.1691    | 142.8445   |
| 99%   | 7.7344     | 10.0681    | 13.7816    | 19.4671    | 28.9596    | 43.8272    | 69.3530    | 109.4902   | 172.9687   | 263.1522   |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 62.8459    | 84.0030    | 108.6047   | 136.8840   | 166.2604   | 194.6447   | 223.6131   | 251.2610   | 277.4218   | 301.4273   |
| 95%   | 117.9447   | 160.8280   | 212.2932   | 273.0593   | 338.9111   | 407.1351   | 478.4383   | 548.2783   | 620.0444   | 687.2716   |
| 97.5% | 206.0366   | 284.9818   | 380.5156   | 498.9472   | 633.3262   | 785.1593   | 927.0660   | 1081.1835  | 1236.2964  | 1393.1243  |
| 99%   | 390.8366   | 554.9610   | 764.3573   | 1018.9484  | 1317.5143  | 1641.3140  | 2030.1542  | 2441.0759  | 2827.9077  | 3271.2950  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 325.9246   | 346.1555   | 365.4151   | 383.5332   | 400.4033   | 414.9114   | 429.3964   | 443.4532   | 455.8427   | 468.0732   |
| 95%   | 750.6281   | 813.3840   | 877.3942   | 931.6379   | 985.2736   | 1039.5605  | 1083.5453  | 1127.5085  | 1169.8061  | 1208.9850  |
| 97.5% | 1559.5054  | 1715.5669  | 1849.4716  | 1991.2270  | 2141.5983  | 2277.4885  | 2410.8521  | 2531.3445  | 2637.5560  | 2735.0248  |
| 99%   | 3678.9681  | 4145.6751  | 4544.7297  | 5035.7310  | 5558.3975  | 5953.5292  | 6331.2039  | 6776.2061  | 7110.8184  | 7357.6609  |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 478.5198   | 487.8860   | 498.3826   | 506.4781   | 517.1592   | 526.4191   | 536.7769   | 548.5465   | 559.9505   | 571.0032   |
| 95%   | 1247.1678  | 1283.5377  | 1315.1621  | 1347.2731  | 1378.3690  | 1417.1093  | 1444.0455  | 1483.6122  | 1524.5704  | 1564.3670  |
| 97.5% | 2852.9866  | 2928.8035  | 3025.8950  | 3120.1541  | 3207.5610  | 3320.8640  | 3409.4708  | 3531.4568  | 3635.5962  | 3737.3100  |
| 99%   | 7720.5485  | 8086.0394  | 8385.0340  | 8753.6525  | 8982.9539  | 9254.5608  | 9553.0957  | 9978.7422  | 10350.4506 | 10722.3273 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 580.4680   | 591.2372   | 601.9433   | 612.7885   | 622.9272   | 631.1902   | 639.9746   | 648.3462   | 658.2277   | 668.7734   |
| 95%   | 1603.1224  | 1649.1654  | 1687.8751  | 1728.6100  | 1768.2744  | 1811.0532  | 1849.8629  | 1891.3274  | 1942.7596  | 1978.9512  |
| 97.5% | 3862.8515  | 4020.7251  | 4183.0188  | 4302.6871  | 4460.8225  | 4595.0250  | 4712.0116  | 4853.3962  | 4993.5184  | 5157.9398  |
| 99%   | 11094.0087 | 11468.1091 | 11925.0990 | 12361.6074 | 12840.3510 | 13160.0995 | 13587.6224 | 14051.1753 | 14568.0879 | 15026.7875 |

Table 33: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 1 regressors for the Quadratic Spectral kernel.

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 3.3869     | 4.9034     | 7.5419     | 12.3493    | 21.3041    | 38.0333    | 67.3236    | 111.6149   | 172.8476   | 246.6156   |
| 95%   | 4.8423     | 7.2105     | 11.3897    | 19.2154    | 34.9622    | 65.3515    | 119.5334   | 206.2274   | 327.4548   | 483.6968   |
| 97.5% | 6.4214     | 9.6757     | 15.7228    | 27.9678    | 52.2805    | 102.0697   | 194.9113   | 342.7643   | 560.9859   | 870.3736   |
| 99%   | 8.5689     | 13.3367    | 22.5731    | 42.4556    | 83.9354    | 172.9223   | 339.8085   | 631.2328   | 1094.1559  | 1713.0736  |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 324.5877   | 403.1058   | 480.0257   | 549.8504   | 611.5847   | 666.8727   | 716.5693   | 760.0031   | 798.7794   | 837.4995   |
| 95%   | 665.6976   | 865.9951   | 1072.6834  | 1275.4458  | 1456.4622  | 1620.1136  | 1780.0283  | 1926.6129  | 2062.5811  | 2178.4340  |
| 97.5% | 1251.7363  | 1684.7069  | 2116.9884  | 2579.2619  | 3018.9110  | 3445.9582  | 3851.2535  | 4203.2385  | 4585.0378  | 4873.9268  |
| 99%   | 2584.3237  | 3558.7190  | 4623.1504  | 5843.4586  | 7159.4042  | 8422.4289  | 9516.1015  | 10756.0894 | 11890.7694 | 12879.6520 |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 870.1627   | 902.0767   | 931.1791   | 953.8069   | 983.0450   | 1003.6483  | 1026.7430  | 1048.2817  | 1063.4757  | 1079.6965  |
| 95%   | 2291.3698  | 2413.9606  | 2524.5280  | 2607.9489  | 2695.4953  | 2776.3724  | 2871.4065  | 2942.6082  | 3007.5101  | 3064.4862  |
| 97.5% | 5196.4237  | 5476.8569  | 5710.5936  | 6014.2702  | 6233.6509  | 6467.8353  | 6754.5368  | 7001.3978  | 7205.1359  | 7399.8319  |
| 99%   | 13913.5051 | 14897.0226 | 15803.4790 | 16773.9785 | 17597.9531 | 18574.2496 | 19255.6373 | 20131.8373 | 20904.9813 | 21768.2818 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 1095.5066  | 1106.4393  | 1120.9656  | 1135.9004  | 1154.2694  | 1167.7995  | 1182.5233  | 1196.9496  | 1211.1612  | 1224.9267  |
| 95%   | 3143.6697  | 3212.8331  | 3268.6453  | 3326.6743  | 3380.5817  | 3436.1101  | 3506.9963  | 3570.9749  | 3648.6556  | 3713.8263  |
| 97.5% | 7627.0067  | 7840.7726  | 8048.3043  | 8244.3691  | 8488.0849  | 8731.6560  | 8883.2634  | 9080.0103  | 9376.2535  | 9624.7745  |
| 99%   | 22472.5662 | 23301.4969 | 23861.8835 | 24777.7162 | 25684.6943 | 26483.8681 | 27268.8311 | 27871.0912 | 28714.2498 | 29197.6232 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 1241.4209  | 1252.7488  | 1264.6202  | 1279.5306  | 1291.8628  | 1303.9109  | 1317.5687  | 1329.7172  | 1341.8654  | 1353.3751  |
| 95%   | 3783.0834  | 3853.8781  | 3920.6820  | 3993.0624  | 4060.5894  | 4112.0469  | 4162.6339  | 4237.0495  | 4302.8653  | 4369.8743  |
| 97.5% | 9906.1815  | 10203.7871 | 10459.4867 | 10755.5684 | 10956.9084 | 11215.7512 | 11517.5202 | 11813.7789 | 12096.5983 | 12315.8436 |
| 99%   | 30349.1060 | 31528.3090 | 32509.4964 | 33597.9345 | 34586.1850 | 35968.6133 | 37083.9822 | 38283.3390 | 39135.4278 | 40206.8469 |

Table 34: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 2 regressors for the Quadratic Spectral kernel.

|       |            |            |            |            |            |            |            |            |            |            |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
| 90%   | 5.8064     | 8.5292     | 13.4159    | 22.4316    | 40.3520    | 73.8930    | 132.5287   | 224.7617   | 347.9222   | 504.0566   |
| 95%   | 7.6671     | 11.7080    | 18.8410    | 33.0657    | 61.2711    | 117.7177   | 220.3175   | 386.1265   | 625.7300   | 942.7300   |
| 97.5% | 9.6792     | 14.8904    | 25.1556    | 45.7376    | 88.5148    | 178.6941   | 344.5513   | 618.2786   | 1043.1470  | 1642.3788  |
| 99%   | 12.2736    | 19.6585    | 34.4993    | 67.1114    | 138.0730   | 287.6352   | 586.0445   | 1095.9131  | 1946.6917  | 3163.8638  |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 677.6162   | 862.9397   | 1038.1332  | 1203.0641  | 1353.2791  | 1490.6142  | 1612.6963  | 1715.0384  | 1812.4158  | 1907.8220  |
| 95%   | 1317.0349  | 1718.5878  | 2167.8257  | 2596.2950  | 3027.8324  | 3417.1819  | 3774.1748  | 4117.2450  | 4434.8013  | 4735.4820  |
| 97.5% | 2383.0916  | 3222.9621  | 4181.4725  | 5088.9368  | 6084.2099  | 7012.8709  | 7899.8213  | 8778.1874  | 9483.1215  | 10303.8313 |
| 99%   | 4820.6996  | 6786.2088  | 9026.7155  | 11622.6010 | 13997.9568 | 16724.1049 | 19368.4003 | 21643.6823 | 23910.3462 | 25989.7819 |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 1991.8124  | 2066.5062  | 2139.9567  | 2198.3571  | 2260.5299  | 2319.1216  | 2377.9553  | 2421.9255  | 2472.2921  | 2510.3201  |
| 95%   | 4981.1305  | 5232.7705  | 5456.8098  | 5699.8764  | 5928.3478  | 6131.5226  | 6313.0593  | 6486.7959  | 6691.0882  | 6851.6523  |
| 97.5% | 10996.4445 | 11641.5414 | 12320.3191 | 12908.4326 | 13540.7131 | 14156.0189 | 14791.6937 | 15297.3180 | 15785.6770 | 16283.0442 |
| 99%   | 28132.2684 | 30158.4325 | 32049.7257 | 34302.1291 | 36032.9523 | 38002.9387 | 39742.2647 | 41534.2850 | 42944.7692 | 45024.9212 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 2554.2053  | 2598.4498  | 2642.1040  | 2680.0465  | 2715.3929  | 2756.7084  | 2799.6505  | 2839.5349  | 2877.8848  | 2914.7533  |
| 95%   | 6990.1942  | 7136.8356  | 7308.1287  | 7470.5906  | 7634.9526  | 7772.1542  | 7936.5761  | 8125.6519  | 8307.3359  | 8447.7610  |
| 97.5% | 16719.1755 | 17142.6782 | 17651.6404 | 18056.2996 | 18577.6709 | 18989.4266 | 19475.1528 | 19902.4003 | 20418.8473 | 21077.5145 |
| 99%   | 46278.2289 | 48089.7449 | 49379.7599 | 50746.6925 | 52056.3025 | 53409.1970 | 54815.1813 | 56450.0157 | 58432.5614 | 61223.9884 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 2957.2185  | 2999.7833  | 3046.6824  | 3074.6257  | 3102.3501  | 3131.8951  | 3165.3917  | 3201.7982  | 3229.2966  | 3258.9889  |
| 95%   | 8647.1107  | 8795.3543  | 9005.3015  | 9185.3025  | 9340.1466  | 9513.9367  | 9674.5040  | 9848.8241  | 10000.0575 | 10174.8849 |
| 97.5% | 21649.4821 | 22099.6080 | 22759.8476 | 23555.8090 | 24139.5954 | 24865.1573 | 25621.1338 | 26255.0101 | 26936.3196 | 27598.8462 |
| 99%   | 63147.1721 | 65442.7514 | 67586.5918 | 70054.0296 | 71817.5440 | 75031.8482 | 77709.3083 | 80154.1392 | 82410.2563 | 85425.5081 |

Table 35: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and 2 regressors for the Quadratic Spectral kernel.

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 3.8010     | 6.5458     | 12.6218    | 27.2027    | 61.4039    | 130.7521   | 242.7132   | 388.6893   | 547.1117   | 698.6714   |
| 95%   | 5.4870     | 9.6822     | 19.4318    | 44.2580    | 104.0654   | 230.1341   | 447.9700   | 749.7863   | 1126.3407  | 1545.3155  |
| 97.5% | 7.3791     | 13.2631    | 27.7632    | 65.4325    | 163.4301   | 372.3809   | 759.6245   | 1356.6981  | 2150.8852  | 3077.2077  |
| 99%   | 9.8421     | 18.5509    | 40.9147    | 104.0503   | 266.4845   | 650.8662   | 1432.8970  | 2711.3334  | 4468.0189  | 6663.8894  |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 827.8554   | 952.2064   | 1047.5335  | 1133.1892  | 1209.5370  | 1275.5892  | 1329.3898  | 1375.0681  | 1417.2258  | 1452.3047  |
| 95%   | 1944.3172  | 2340.1390  | 2654.5323  | 2939.9319  | 3181.0693  | 3411.5846  | 3608.5638  | 3800.1255  | 3989.3044  | 4119.1652  |
| 97.5% | 4061.8795  | 4997.5873  | 5902.4519  | 6756.2549  | 7443.4945  | 8146.3649  | 8744.4980  | 9367.6708  | 9995.9721  | 10500.5950 |
| 99%   | 9153.7081  | 11633.1036 | 14247.3506 | 16738.6049 | 19031.3185 | 21330.0178 | 23884.4089 | 25919.2523 | 27593.0519 | 29300.9396 |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 1492.2523  | 1528.4871  | 1562.9863  | 1596.1927  | 1622.5791  | 1650.7371  | 1674.1665  | 1698.1077  | 1718.5247  | 1735.3662  |
| 95%   | 4255.3550  | 4413.2675  | 4545.5557  | 4702.6580  | 4828.9897  | 4940.3522  | 5086.5525  | 5199.5395  | 5306.8849  | 5397.8834  |
| 97.5% | 10913.0782 | 11350.3790 | 11724.7875 | 12209.7262 | 12610.4536 | 13052.2313 | 13481.6121 | 13860.6240 | 14195.1398 | 14529.7904 |
| 99%   | 31030.4253 | 32735.2213 | 34168.7253 | 35929.3525 | 37297.4564 | 38785.6741 | 39799.7391 | 41367.8773 | 42575.3603 | 43809.9843 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 1753.3906  | 1768.8479  | 1784.4606  | 1800.7781  | 1815.2967  | 1826.3941  | 1834.5866  | 1850.4659  | 1868.3549  | 1890.3011  |
| 95%   | 5493.0353  | 5603.0941  | 5674.8779  | 5756.7369  | 5831.3994  | 5926.7702  | 6038.8992  | 6126.9073  | 6200.0353  | 6274.0110  |
| 97.5% | 14879.4620 | 15203.8550 | 15523.1202 | 15795.4793 | 16147.6270 | 16442.0946 | 16834.8539 | 17230.4192 | 17689.5245 | 18056.7220 |
| 99%   | 45010.8358 | 45832.9592 | 47997.8119 | 49528.8832 | 51081.7849 | 52820.8381 | 53998.1615 | 55830.7540 | 58511.4031 | 59948.8340 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 1905.5118  | 1918.4674  | 1932.4546  | 1941.0534  | 1949.5391  | 1961.2143  | 1968.6365  | 1979.5087  | 1997.3944  | 2009.6993  |
| 95%   | 6364.6439  | 6441.8525  | 6540.3208  | 6651.9863  | 6745.9313  | 6826.6457  | 6942.5320  | 7009.6520  | 7113.2831  | 7208.8912  |
| 97.5% | 18382.8260 | 18814.7785 | 19200.2147 | 19520.8649 | 19973.6633 | 20406.1887 | 20819.7957 | 21234.1879 | 21576.6368 | 22023.4245 |
| 99%   | 62024.6412 | 63697.1720 | 64897.7436 | 67023.0283 | 69330.3931 | 71179.5505 | 73001.9085 | 74901.2884 | 76375.5333 | 78911.5211 |

Table 36: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 3 regressors for the Quadratic Spectral kernel.

|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 6.5823      | 11.5658     | 22.8780     | 50.7982     | 117.3827    | 255.4965    | 486.8494    | 807.0218    | 1166.7163   | 1536.4160   |
| 95%   | 8.7338      | 15.7814     | 32.6688     | 76.4354     | 187.4421    | 425.1757    | 850.9840    | 1490.9039   | 2297.8470   | 3198.8886   |
| 97.5% | 11.0169     | 20.4238     | 44.0042     | 109.6156    | 281.4797    | 672.3828    | 1410.7302   | 2549.7886   | 4140.1473   | 5986.9432   |
| 99%   | 14.1139     | 27.0995     | 62.0671     | 164.6058    | 449.7215    | 1113.5560   | 2436.5075   | 4746.2394   | 8023.9729   | 12268.2051  |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 1882.2913   | 2178.5680   | 2437.4767   | 2639.2355   | 2828.5783   | 2992.0149   | 3149.7536   | 3284.7861   | 3421.0579   | 3533.5891   |
| 95%   | 4112.2357   | 4906.2749   | 5692.9983   | 6390.1052   | 7006.1979   | 7572.5594   | 8061.9628   | 8481.4055   | 8893.5929   | 9294.4462   |
| 97.5% | 7982.9744   | 10041.0561  | 12021.8896  | 13756.7871  | 15313.5664  | 16779.0353  | 18166.7035  | 19501.5623  | 20663.4789  | 21627.9784  |
| 99%   | 17058.1975  | 22591.3837  | 28271.7342  | 34053.4679  | 38840.8384  | 43300.3669  | 47750.3778  | 52314.8787  | 55466.1734  | 59201.0743  |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 3613.0478   | 3717.6808   | 3816.2469   | 3904.2284   | 3995.3991   | 4067.4844   | 4131.0794   | 4197.0383   | 4254.9618   | 4311.2538   |
| 95%   | 9690.5532   | 10006.0031  | 10357.7142  | 10711.7565  | 11031.0752  | 11334.3911  | 11597.5382  | 11866.7730  | 12123.4245  | 12383.2837  |
| 97.5% | 22896.1663  | 24029.5656  | 25050.2344  | 26049.4172  | 27137.7555  | 28076.8701  | 29127.8893  | 29985.6328  | 30710.2349  | 31645.7380  |
| 99%   | 62079.2020  | 65961.1853  | 69326.0692  | 72608.2778  | 75934.6799  | 79113.5965  | 82327.3436  | 84780.0781  | 88554.2855  | 91946.5388  |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 4370.0409   | 4424.9450   | 4469.0631   | 4509.9797   | 4549.4199   | 4600.8038   | 4634.3418   | 4675.6007   | 4711.7236   | 4766.0647   |
| 95%   | 12568.9274  | 12828.7265  | 13100.5220  | 13348.2783  | 13678.9098  | 13904.7153  | 14174.5824  | 14502.0809  | 14694.2220  | 14944.5592  |
| 97.5% | 32615.1221  | 33197.1378  | 34074.1952  | 34834.9565  | 35586.1648  | 36551.7331  | 37235.5101  | 38347.2048  | 39391.1634  | 40141.2282  |
| 99%   | 95422.6256  | 98669.1773  | 101503.9965 | 105458.2095 | 108820.4840 | 112457.9641 | 115288.8364 | 117703.1398 | 121177.5165 | 124280.2881 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 4792.9851   | 4841.3854   | 4873.0768   | 4919.0578   | 4949.4357   | 4969.9304   | 5004.9244   | 5039.3392   | 5076.6974   | 5104.5755   |
| 95%   | 15224.3829  | 15509.9501  | 15758.4184  | 16002.6119  | 16286.5466  | 16662.4886  | 16891.7292  | 17074.6763  | 17300.3662  | 17536.5039  |
| 97.5% | 41189.7713  | 42090.7640  | 43204.9437  | 44017.1109  | 45097.5123  | 46200.4743  | 47379.9455  | 48674.5225  | 49771.1331  | 50945.8255  |
| 99%   | 127974.5288 | 131749.4095 | 135894.8855 | 140350.7092 | 144134.5806 | 149020.7770 | 153314.0717 | 156424.4465 | 161820.1166 | 165753.8157 |

Table 37: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and 3 regressors for the Quadratic Spectral kernel.

|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 8.9999      | 15.9171     | 32.0999     | 72.3995     | 169.7548    | 376.9846    | 726.9643    | 1208.2812   | 1781.5699   | 2375.6864   |
| 95%   | 11.4825     | 21.0708     | 44.3479     | 105.9165    | 264.1311    | 607.2615    | 1237.9567   | 2191.8389   | 3354.1127   | 4689.4590   |
| 97.5% | 14.0876     | 26.5431     | 58.7254     | 147.2817    | 382.8946    | 931.4620    | 1975.3566   | 3648.3890   | 5933.1703   | 8555.9816   |
| 99%   | 17.5165     | 34.4738     | 81.4707     | 220.0432    | 598.3691    | 1524.5942   | 3389.1120   | 6576.9054   | 11467.2623  | 17791.1905  |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 2941.1293   | 3431.3335   | 3836.9579   | 4197.2464   | 4495.9368   | 4763.6459   | 5003.4484   | 5216.6675   | 5413.2496   | 5606.2639   |
| 95%   | 6035.2983   | 7348.1014   | 8588.0458   | 9669.8100   | 10652.5374  | 11558.4019  | 12349.5024  | 13059.7349  | 13758.8152  | 14395.5952  |
| 97.5% | 11584.5024  | 14551.5185  | 17457.8951  | 20249.5111  | 22906.1327  | 25463.4568  | 27514.7321  | 29527.5612  | 31319.3629  | 32966.8957  |
| 99%   | 25359.0681  | 32916.8666  | 41129.0656  | 49138.4471  | 56603.2281  | 64475.0079  | 72118.0511  | 78613.6589  | 85741.3364  | 92290.2364  |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 5772.4558   | 5934.0054   | 6078.9202   | 6229.8074   | 6359.9337   | 6497.7428   | 6607.3418   | 6723.3894   | 6831.9615   | 6919.9736   |
| 95%   | 15027.4970  | 15685.1397  | 16225.8567  | 16833.7216  | 17391.3041  | 18014.8071  | 18513.8400  | 18988.9194  | 19427.2744  | 19929.2809  |
| 97.5% | 34406.7843  | 35906.2573  | 37525.8671  | 39071.9747  | 40741.4087  | 42196.4694  | 43657.4743  | 44912.3553  | 46624.3515  | 47865.1985  |
| 99%   | 98241.9126  | 102399.6008 | 106155.9609 | 110642.5930 | 115237.1878 | 119849.7739 | 124316.0260 | 129274.8529 | 133130.6574 | 136565.8082 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 7024.0930   | 7102.6189   | 7198.5211   | 7255.5794   | 7324.5769   | 7386.4948   | 7446.5720   | 7540.3810   | 7615.3264   | 7687.5911   |
| 95%   | 20421.0069  | 20788.2190  | 21178.6939  | 21528.8074  | 21922.6519  | 22354.0068  | 22777.0959  | 23225.5195  | 23608.9006  | 24039.2648  |
| 97.5% | 49078.9825  | 50235.1893  | 51867.6961  | 52835.3967  | 53933.3792  | 55383.6518  | 56724.3683  | 57961.8103  | 59557.4738  | 61183.4333  |
| 99%   | 140835.8852 | 145561.3567 | 150356.5097 | 155284.6793 | 159449.7304 | 163191.1260 | 170231.9140 | 177061.6755 | 182508.1146 | 187955.4976 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 7755.0057   | 7821.0093   | 7885.5772   | 7957.8873   | 8026.0855   | 8080.4331   | 8121.9340   | 8173.0565   | 8206.2323   | 8248.2290   |
| 95%   | 24579.8967  | 25148.2095  | 25616.8231  | 26119.1678  | 26557.5722  | 26998.9464  | 27362.9810  | 27802.2578  | 28289.2211  | 28678.9549  |
| 97.5% | 62875.2331  | 64209.8635  | 65821.5854  | 67555.8233  | 69466.5048  | 71439.4546  | 73202.3157  | 74980.6950  | 76920.9040  | 78654.9746  |
| 99%   | 193935.5429 | 198547.9787 | 206054.0460 | 211669.3460 | 218168.1877 | 226131.3278 | 233796.0493 | 239774.9806 | 248705.3827 | 255096.5113 |

Table 38: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and 3 regressors for the Quadratic Spectral kernel.

|       |            |            |            |            |            |            |             |             |             |             |
|-------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|
|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14        | 0.16        | 0.18        | 0.20        |
| 90%   | 4.3161     | 9.0304     | 22.6388    | 63.9746    | 166.4197   | 351.9705   | 605.1584    | 870.6391    | 1104.0782   | 1287.7739   |
| 95%   | 6.2554     | 13.4550    | 35.5539    | 105.4735   | 289.3947   | 651.4990   | 1188.2003   | 1848.3048   | 2517.5560   | 3102.7384   |
| 97.5% | 8.3294     | 18.4847    | 51.3584    | 160.2579   | 462.4529   | 1089.4796  | 2147.6917   | 3544.2273   | 5041.9613   | 6517.2422   |
| 99%   | 11.2364    | 26.2657    | 76.7590    | 256.4638   | 785.0356   | 2010.3574  | 4127.4636   | 7188.7416   | 11125.1665  | 15402.3907  |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 1431.4235  | 1544.4661  | 1640.8478  | 1731.5322  | 1808.3016  | 1864.6044  | 1923.7083   | 1969.9795   | 2013.4658   | 2049.5560   |
| 95%   | 3615.9728  | 3977.9005  | 4314.2878  | 4622.9290  | 4923.6949  | 5174.5148  | 5399.1811   | 5638.3889   | 5832.4343   | 6027.2406   |
| 97.5% | 7892.9610  | 9053.3809  | 10007.0025 | 10890.9086 | 11668.9880 | 12529.1133 | 13182.4441  | 13927.3000  | 14648.9265  | 15266.7998  |
| 99%   | 19754.4903 | 23814.0938 | 27045.3811 | 30014.5249 | 32625.9439 | 34817.1716 | 37119.2287  | 39611.5336  | 41703.1154  | 43831.1757  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 2088.2575  | 2130.2830  | 2165.9784  | 2200.8153  | 2230.7611  | 2258.1980  | 2287.0449   | 2313.5500   | 2336.3640   | 2353.6287   |
| 95%   | 6182.6128  | 6361.9110  | 6522.5398  | 6665.1595  | 6822.7450  | 6961.7807  | 7106.9958   | 7207.1588   | 7311.9477   | 7428.3757   |
| 97.5% | 15813.1536 | 16496.0814 | 16966.7911 | 17539.6632 | 18094.4588 | 18744.4471 | 19275.5948  | 19856.1278  | 20321.8001  | 20732.7906  |
| 99%   | 46340.3430 | 48499.5911 | 50830.4829 | 53572.8698 | 55454.1662 | 57538.6554 | 59393.1826  | 61481.4788  | 63359.6848  | 64949.8847  |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 2370.8350  | 2387.8009  | 2402.1121  | 2420.1025  | 2431.8293  | 2446.9827  | 2462.0459   | 2482.8486   | 2500.9956   | 2509.2816   |
| 95%   | 7542.7380  | 7653.9473  | 7783.1565  | 7877.4048  | 7982.0768  | 8082.6221  | 8167.5638   | 8257.2853   | 8342.9716   | 8454.7612   |
| 97.5% | 21164.1169 | 21545.4947 | 21865.4950 | 22330.6715 | 22763.7835 | 23223.9677 | 23799.0289  | 24276.2076  | 24770.3910  | 25280.4608  |
| 99%   | 65968.5735 | 67757.2396 | 69460.2054 | 71754.6403 | 74011.5896 | 75797.6355 | 77677.0192  | 78786.5603  | 81392.7613  | 82835.4314  |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 2524.7749  | 2545.3668  | 2556.7811  | 2564.6057  | 2578.6081  | 2592.4909  | 2600.7172   | 2609.8765   | 2619.3426   | 2631.4310   |
| 95%   | 8559.2919  | 8681.3219  | 8742.9380  | 8846.5639  | 8938.5403  | 9019.9800  | 9118.1659   | 9249.5871   | 9326.3663   | 9393.7913   |
| 97.5% | 25781.2225 | 26189.2562 | 26723.9790 | 27266.1458 | 28032.5330 | 28578.0547 | 29085.8980  | 29468.8014  | 29823.2822  | 30293.3202  |
| 99%   | 85199.4185 | 87634.9810 | 90268.8281 | 93648.5510 | 95987.2884 | 98423.5268 | 101398.2269 | 103751.4075 | 107408.2286 | 110909.7339 |

Table 39: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and 4 regressors for the Quadratic Spectral kernel.



|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 7.4903      | 16.0113     | 41.4246     | 121.3685    | 330.1657    | 727.8254    | 1294.0995   | 1911.0107   | 2493.3854   | 2987.5075   |
| 95%   | 9.9528      | 22.0778     | 60.5793     | 188.2167    | 541.2539    | 1254.3210   | 2368.2826   | 3773.2402   | 5191.9348   | 6474.7674   |
| 97.5% | 12.6018     | 28.9737     | 83.7204     | 272.0389    | 821.9648    | 2023.8795   | 3992.2599   | 6704.9639   | 10001.1801  | 13147.7984  |
| 99%   | 16.2199     | 38.6602     | 120.1186    | 424.0411    | 1360.3764   | 3483.3861   | 7274.1664   | 13061.0837  | 20372.8309  | 28318.6891  |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 3341.8720   | 3676.9194   | 3932.2159   | 4145.4390   | 4343.6136   | 4498.4747   | 4635.0912   | 4781.5831   | 4906.2225   | 5017.2776   |
| 95%   | 7693.7810   | 8689.9373   | 9542.4285   | 10304.8174  | 10989.9532  | 11627.9917  | 12269.2467  | 12826.6508  | 13376.7323  | 13884.7411  |
| 97.5% | 15930.4952  | 18614.0176  | 20838.4312  | 22928.1322  | 24871.2919  | 26364.4821  | 28202.5209  | 29906.6993  | 31548.3261  | 32751.4778  |
| 99%   | 37064.0875  | 44892.4817  | 52239.1852  | 58673.1468  | 64244.7183  | 70400.0837  | 74720.1319  | 79479.4960  | 83563.1343  | 88380.6757  |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 5118.7175   | 5228.0677   | 5311.2008   | 5398.4137   | 5484.5149   | 5568.7998   | 5633.4386   | 5687.7021   | 5763.3715   | 5819.8683   |
| 95%   | 14326.5929  | 14754.6179  | 15188.1808  | 15600.1611  | 16020.6158  | 16444.6537  | 16868.6544  | 17198.3626  | 17445.9900  | 17720.8556  |
| 97.5% | 33929.2050  | 35507.1678  | 36701.9369  | 38071.5125  | 39633.7151  | 41042.5354  | 42310.3921  | 43568.9932  | 44852.5155  | 45759.3293  |
| 99%   | 92862.9171  | 96761.2436  | 101302.0602 | 105839.4408 | 110787.0747 | 115386.2858 | 118710.3430 | 122537.7053 | 127281.0418 | 130174.0621 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 5862.0903   | 5911.8263   | 5950.2042   | 5998.0274   | 6041.5005   | 6086.3313   | 6132.7559   | 6176.4973   | 6213.5163   | 6255.3676   |
| 95%   | 18102.4565  | 18414.3627  | 18719.3430  | 19026.0945  | 19353.5715  | 19674.4709  | 20013.8158  | 20294.5366  | 20622.9411  | 20901.7912  |
| 97.5% | 46878.8045  | 48088.9322  | 49239.4122  | 50294.7476  | 51381.9777  | 52579.0486  | 53449.2261  | 55001.8011  | 56468.6238  | 57743.8953  |
| 99%   | 134618.2324 | 139077.0240 | 142939.7314 | 147990.7828 | 154169.6688 | 157974.2876 | 163795.3709 | 170097.0232 | 176560.6679 | 182621.7816 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 6298.3924   | 6317.1308   | 6350.6014   | 6386.7909   | 6414.2428   | 6459.7713   | 6493.8407   | 6522.8884   | 6547.7288   | 6573.5117   |
| 95%   | 21174.9069  | 21467.3966  | 21744.7638  | 21967.4886  | 22279.8459  | 22451.2623  | 22745.0197  | 23025.3682  | 23224.9792  | 23419.3776  |
| 97.5% | 58984.7766  | 60553.1107  | 61842.7083  | 62818.4987  | 64514.5050  | 65876.0486  | 67322.9559  | 68723.8974  | 70187.7170  | 71041.1658  |
| 99%   | 187463.3593 | 191680.3045 | 195703.6684 | 200996.7359 | 206288.0571 | 211977.6440 | 217882.2699 | 224111.5746 | 228775.7747 | 235960.4641 |

Table 40: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and 4 regressors for the Quadratic Spectral kernel.

|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 10.1638     | 22.0008     | 58.1808     | 173.0023    | 477.3698    | 1061.9220   | 1915.2826   | 2903.6301   | 3812.9403   | 4587.1421   |
| 95%   | 13.0586     | 29.3848     | 82.6780     | 260.8100    | 762.9136    | 1799.1766   | 3454.4341   | 5597.5657   | 7814.9926   | 9875.8117   |
| 97.5% | 15.9508     | 37.8027     | 111.7113    | 375.2494    | 1137.0047   | 2810.2032   | 5685.6208   | 9828.9261   | 14426.0395  | 19148.0560  |
| 99%   | 20.0707     | 49.7505     | 158.0543    | 567.8881    | 1790.2768   | 4693.8861   | 10109.8869  | 18468.7788  | 29332.6677  | 41406.1270  |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 5187.6557   | 5668.1736   | 6089.2372   | 6430.6111   | 6716.0340   | 6974.7351   | 7233.7009   | 7477.5108   | 7678.4142   | 7867.9558   |
| 95%   | 11762.8037  | 13299.1513  | 14576.9724  | 15833.4595  | 16875.8959  | 17860.7330  | 18803.0000  | 19623.1984  | 20570.1091  | 21391.6008  |
| 97.5% | 23416.8373  | 27430.1304  | 30796.7330  | 34215.1647  | 36958.5955  | 39818.7941  | 42734.3944  | 45302.3764  | 47373.6991  | 49642.5969  |
| 99%   | 53850.4770  | 65730.4794  | 76069.8683  | 84243.7926  | 92436.1516  | 99706.1380  | 108815.0301 | 114442.8195 | 119876.6606 | 126023.3808 |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 8030.8241   | 8207.2752   | 8389.0185   | 8559.0386   | 8727.9109   | 8880.8779   | 8991.1325   | 9103.2563   | 9200.0047   | 9292.8620   |
| 95%   | 22269.6710  | 23064.2686  | 23742.2227  | 24542.9523  | 25107.9073  | 25725.9135  | 26323.9922  | 26835.5402  | 27285.3488  | 27663.8757  |
| 97.5% | 52284.9515  | 54300.6006  | 56352.4640  | 58365.9092  | 59990.4900  | 61865.9188  | 63528.9774  | 65419.3503  | 67192.6874  | 68875.7456  |
| 99%   | 132311.6525 | 140749.1083 | 148384.8587 | 153805.9234 | 160723.9695 | 168682.0788 | 176104.1484 | 182151.5077 | 187528.3175 | 193239.3255 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 9367.6950   | 9442.3051   | 9488.6485   | 9576.2649   | 9642.2604   | 9722.4708   | 9825.5761   | 9861.8934   | 9939.5395   | 10025.1756  |
| 95%   | 28170.3072  | 28594.8835  | 29093.5020  | 29549.0692  | 30041.4014  | 30497.8497  | 30763.4707  | 31250.2890  | 31630.8870  | 32188.1690  |
| 97.5% | 70657.6359  | 72448.6723  | 74112.1934  | 76152.6513  | 77720.1294  | 79340.6995  | 81608.6801  | 84153.8456  | 86402.8237  | 88171.9478  |
| 99%   | 19937.9822  | 205998.1849 | 211506.7439 | 220976.4898 | 225825.0417 | 232379.5055 | 238963.7407 | 247287.0871 | 256583.5132 | 265145.1533 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 10048.8140  | 10108.2713  | 10181.0472  | 10251.5955  | 10293.5147  | 10329.5927  | 10377.9496  | 10413.0121  | 10444.4542  | 10486.0809  |
| 95%   | 32611.7064  | 33075.5610  | 33621.2252  | 34128.2943  | 34626.6080  | 35020.9357  | 35423.4430  | 35893.7432  | 36317.1429  | 36681.7475  |
| 97.5% | 89871.9369  | 92262.5026  | 94028.7103  | 96195.5435  | 98824.6379  | 101062.0580 | 102818.9844 | 104716.7940 | 107068.3039 | 108769.8659 |
| 99%   | 274815.8027 | 282312.7391 | 291487.8156 | 302479.1109 | 311311.4182 | 318868.2555 | 327820.3061 | 336301.7451 | 347977.5725 | 359321.0978 |

Table 41: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and 4 regressors for the Quadratic Spectral kernel.

|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 12.7671     | 28.1051     | 75.6034     | 229.1921    | 635.3592    | 1425.2956   | 2612.0964   | 3944.8547   | 5224.2691   | 6308.7517   |
| 95%   | 16.0753     | 36.7161     | 105.1298    | 338.1394    | 995.0652    | 2367.4343   | 4606.2783   | 7527.0320   | 10476.5215  | 13408.9781  |
| 97.5% | 19.4831     | 45.9014     | 139.3775    | 475.1366    | 1466.6352   | 3654.8247   | 7484.2586   | 12991.1443  | 19463.2064  | 25825.7686  |
| 99%   | 23.6916     | 59.3952     | 194.1462    | 706.6710    | 2308.1910   | 6087.4893   | 13313.6174  | 24510.1874  | 39098.9644  | 54541.2097  |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 7120.1003   | 7873.2550   | 8452.0119   | 8950.9786   | 9404.1402   | 9854.2834   | 10218.4667  | 10568.0253  | 10871.5534  | 11167.0280  |
| 95%   | 15958.3635  | 18026.6839  | 19787.0555  | 21365.0345  | 22878.9638  | 24133.5610  | 25559.7902  | 26780.8509  | 28000.8969  | 29247.8098  |
| 97.5% | 31945.3401  | 37362.4900  | 42093.8052  | 46450.0668  | 49952.2929  | 53944.3828  | 57407.7411  | 60793.1731  | 63656.0468  | 66608.1806  |
| 99%   | 70640.8575  | 85624.0903  | 100380.1682 | 112709.0526 | 124202.9795 | 135240.8657 | 143660.8012 | 154921.8021 | 166619.1731 | 175943.0732 |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 11444.3224  | 11667.4329  | 11935.6839  | 12161.7869  | 12342.5269  | 12557.5113  | 12735.6366  | 12926.4351  | 13073.9374  | 13211.2148  |
| 95%   | 30334.0875  | 31284.5482  | 32216.8613  | 33073.2387  | 34135.4701  | 35029.0398  | 35974.4532  | 36850.2468  | 37455.2822  | 38160.0564  |
| 97.5% | 69902.1486  | 72613.3615  | 75744.0887  | 78419.2509  | 81501.5558  | 84348.6025  | 87519.8553  | 89844.6893  | 91736.0672  | 94616.6270  |
| 99%   | 183863.1529 | 193477.4443 | 201396.4483 | 209862.7362 | 219234.5673 | 229455.5469 | 237636.0313 | 247092.7227 | 255335.6605 | 263288.9543 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 13335.2300  | 13456.6075  | 13562.8171  | 13672.3396  | 13745.7243  | 13839.2897  | 13945.4631  | 14005.4343  | 14100.9742  | 14187.0938  |
| 95%   | 38918.8230  | 39609.6562  | 40488.7499  | 41044.6303  | 41690.0187  | 42597.5017  | 43364.0382  | 43954.4748  | 44681.5479  | 45247.6431  |
| 97.5% | 97414.4816  | 99756.3082  | 101282.0732 | 103312.2036 | 106353.7980 | 108786.3076 | 112388.5584 | 115727.9918 | 118685.0186 | 121675.7621 |
| 99%   | 272074.7379 | 278270.3076 | 286195.1464 | 293231.4147 | 302691.3651 | 312621.3391 | 319985.6767 | 329083.6939 | 337785.7164 | 349893.4673 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 14312.4071  | 14411.6078  | 14469.4141  | 14540.7081  | 14603.4360  | 14675.3686  | 14733.4993  | 14825.2428  | 14862.3017  | 14899.0908  |
| 95%   | 46105.1640  | 46908.0134  | 47500.3200  | 48169.3075  | 48895.7798  | 49667.3178  | 50203.8121  | 50653.9814  | 51250.7467  | 51696.2320  |
| 97.5% | 124330.1526 | 126933.3274 | 130133.2835 | 134018.8000 | 136610.2680 | 139485.4651 | 141759.0753 | 145049.3839 | 147327.1289 | 150131.4885 |
| 99%   | 361155.0083 | 372943.4475 | 384894.3178 | 397983.5608 | 413029.2945 | 428124.8411 | 440890.0578 | 455017.3061 | 470593.1664 | 482386.2284 |

Table 42: Fixed-b critical values for Wald test for 4 hypotheses in regression with intercept and 4 regressors for the Quadratic Spectral kernel.

## 4 Bartlett Kernel (Intercept and Linear Trend)

### 4.1 t-Test

|       |         |         |         |         |         |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
| 95%   | 1.7431  | 1.9301  | 2.1432  | 2.3952  | 2.6751  | 2.9598  | 3.2566  | 3.5523  | 3.8252  | 4.0854  |
| 97.5% | 2.0984  | 2.3322  | 2.6052  | 2.9261  | 3.2747  | 3.6259  | 4.0039  | 4.3780  | 4.7040  | 5.0143  |
| 99%   | 2.5282  | 2.8327  | 3.1750  | 3.5773  | 4.0146  | 4.4676  | 4.9390  | 5.3931  | 5.7812  | 6.1579  |
| 99.5% | 2.8474  | 3.1780  | 3.5881  | 4.0629  | 4.5989  | 5.1205  | 5.6191  | 6.1383  | 6.5892  | 7.0283  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 4.3127  | 4.5067  | 4.6733  | 4.8131  | 4.9275  | 5.0327  | 5.1334  | 5.2294  | 5.3322  | 5.4273  |
| 97.5% | 5.2990  | 5.5311  | 5.7335  | 5.8724  | 6.0320  | 6.1884  | 6.3280  | 6.4621  | 6.5679  | 6.7050  |
| 99%   | 6.4894  | 6.7875  | 7.0118  | 7.2142  | 7.4264  | 7.6378  | 7.7893  | 7.9601  | 8.1128  | 8.2536  |
| 99.5% | 7.3717  | 7.6819  | 7.9496  | 8.1915  | 8.3842  | 8.6391  | 8.8565  | 9.0098  | 9.2114  | 9.4377  |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 5.5356  | 5.6356  | 5.7369  | 5.8384  | 5.9455  | 6.0519  | 6.1545  | 6.2691  | 6.3402  | 6.4287  |
| 97.5% | 6.8149  | 6.9323  | 7.0768  | 7.2044  | 7.3369  | 7.4416  | 7.5876  | 7.7326  | 7.8464  | 7.9205  |
| 99%   | 8.3986  | 8.5738  | 8.7411  | 8.9055  | 9.1341  | 9.2491  | 9.4151  | 9.5914  | 9.7359  | 9.8793  |
| 99.5% | 9.6084  | 9.7591  | 9.8962  | 10.1887 | 10.3466 | 10.5268 | 10.7026 | 10.8528 | 11.0733 | 11.2663 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 6.5170  | 6.6036  | 6.6811  | 6.7620  | 6.8590  | 6.9310  | 6.9904  | 7.0471  | 7.1232  | 7.1953  |
| 97.5% | 8.0253  | 8.1627  | 8.2684  | 8.3649  | 8.4569  | 8.5500  | 8.6422  | 8.7245  | 8.8016  | 8.9005  |
| 99%   | 10.0066 | 10.1259 | 10.2764 | 10.3848 | 10.5076 | 10.6413 | 10.7335 | 10.8621 | 10.9486 | 11.0810 |
| 99.5% | 11.4399 | 11.6045 | 11.7208 | 11.8246 | 12.0080 | 12.1315 | 12.2883 | 12.4311 | 12.4858 | 12.6774 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 7.2642  | 7.3416  | 7.4062  | 7.4778  | 7.5432  | 7.6142  | 7.6764  | 7.7356  | 7.8021  | 7.8647  |
| 97.5% | 8.9846  | 9.0730  | 9.1632  | 9.2551  | 9.3387  | 9.4283  | 9.5017  | 9.5762  | 9.6549  | 9.7392  |
| 99%   | 11.1789 | 11.3155 | 11.4211 | 11.5599 | 11.6586 | 11.7727 | 11.8811 | 11.9554 | 12.0724 | 12.1785 |
| 99.5% | 12.7797 | 12.9190 | 13.0419 | 13.1616 | 13.2867 | 13.4220 | 13.5613 | 13.7138 | 13.8262 | 13.9510 |

Table 43: Fixed-b critical values for t-test in regression with intercept and linear trend and 1 regressors for the Bartlett kernel (Upper tail).

|       |         |         |         |         |         |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
| 95%   | 1.8245  | 2.1237  | 2.4854  | 2.8922  | 3.3241  | 3.7463  | 4.1399  | 4.4692  | 4.7338  | 4.9320  |
| 97.5% | 2.1849  | 2.5620  | 3.0100  | 3.5178  | 4.0435  | 4.5572  | 5.0248  | 5.4246  | 5.7367  | 6.0107  |
| 99%   | 2.6204  | 3.0826  | 3.6270  | 4.2521  | 4.8948  | 5.5182  | 6.0618  | 6.5454  | 6.9329  | 7.2458  |
| 99.5% | 2.9007  | 3.4223  | 4.0763  | 4.8055  | 5.4943  | 6.2216  | 6.7849  | 7.3002  | 7.7458  | 8.1281  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 5.1215  | 5.2804  | 5.4253  | 5.5991  | 5.7565  | 5.8963  | 6.0550  | 6.1940  | 6.3608  | 6.5182  |
| 97.5% | 6.2373  | 6.4303  | 6.5990  | 6.7876  | 6.9697  | 7.1569  | 7.3475  | 7.5527  | 7.7255  | 7.9317  |
| 99%   | 7.5125  | 7.7630  | 7.9958  | 8.1938  | 8.4257  | 8.7110  | 8.9632  | 9.2612  | 9.4520  | 9.6940  |
| 99.5% | 8.4692  | 8.7859  | 9.0207  | 9.2493  | 9.5638  | 9.7848  | 10.1055 | 10.4079 | 10.6416 | 10.8428 |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 6.6491  | 6.7880  | 6.9069  | 7.0507  | 7.1784  | 7.2658  | 7.3777  | 7.4814  | 7.5829  | 7.6893  |
| 97.5% | 8.1224  | 8.2653  | 8.4226  | 8.5730  | 8.6901  | 8.8594  | 9.0078  | 9.1330  | 9.2407  | 9.3679  |
| 99%   | 9.8838  | 10.0692 | 10.2595 | 10.5051 | 10.6789 | 10.8495 | 11.0100 | 11.2045 | 11.3518 | 11.5416 |
| 99.5% | 11.0765 | 11.3042 | 11.5331 | 11.7420 | 12.0033 | 12.2137 | 12.4111 | 12.6019 | 12.7679 | 12.9370 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 7.7865  | 7.8954  | 7.9916  | 8.1029  | 8.1704  | 8.2751  | 8.3691  | 8.4457  | 8.5289  | 8.6148  |
| 97.5% | 9.5033  | 9.6481  | 9.7582  | 9.8927  | 10.0250 | 10.1401 | 10.2223 | 10.3068 | 10.4611 | 10.5843 |
| 99%   | 11.6717 | 11.8075 | 11.9988 | 12.1510 | 12.3157 | 12.4605 | 12.6001 | 12.7526 | 12.8743 | 13.0410 |
| 99.5% | 13.0874 | 13.2917 | 13.4584 | 13.6492 | 13.7498 | 13.9872 | 14.1474 | 14.3537 | 14.4720 | 14.6443 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 8.7063  | 8.7805  | 8.8507  | 8.9319  | 9.0157  | 9.0993  | 9.1701  | 9.2450  | 9.3182  | 9.3892  |
| 97.5% | 10.6767 | 10.7822 | 10.8656 | 10.9587 | 11.0605 | 11.1629 | 11.2529 | 11.3515 | 11.4444 | 11.5370 |
| 99%   | 13.1725 | 13.2990 | 13.4560 | 13.5783 | 13.7030 | 13.8199 | 13.9498 | 14.0848 | 14.2221 | 14.3299 |
| 99.5% | 14.7934 | 14.9320 | 15.0308 | 15.2120 | 15.3867 | 15.5046 | 15.6296 | 15.7890 | 15.9363 | 16.0777 |

Table 44: Fixed-b critical values for t-test in regression with intercept and linear trend and 2 regressors for the Bartlett kernel (Upper tail).

|       |         |         |         |         |         |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
| 95%   | 1.9020  | 2.3287  | 2.8390  | 3.3976  | 3.9360  | 4.4033  | 4.7715  | 5.0668  | 5.2945  | 5.4896  |
| 97.5% | 2.2738  | 2.7959  | 3.4257  | 4.1173  | 4.7732  | 5.3153  | 5.7434  | 6.0832  | 6.3838  | 6.6385  |
| 99%   | 2.7010  | 3.3456  | 4.1416  | 4.9963  | 5.7608  | 6.4091  | 6.8883  | 7.3168  | 7.6737  | 7.9950  |
| 99.5% | 3.0043  | 3.7659  | 4.6844  | 5.6357  | 6.4872  | 7.1591  | 7.7622  | 8.2373  | 8.6196  | 8.9909  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 5.6790  | 5.9028  | 6.1006  | 6.3219  | 6.5381  | 6.7175  | 6.8869  | 7.0487  | 7.2121  | 7.3719  |
| 97.5% | 6.8807  | 7.1218  | 7.3732  | 7.6411  | 7.8771  | 8.1341  | 8.3531  | 8.5611  | 8.7718  | 8.9591  |
| 99%   | 8.3161  | 8.6014  | 8.8915  | 9.2337  | 9.5407  | 9.8279  | 10.0677 | 10.3228 | 10.6297 | 10.8932 |
| 99.5% | 9.2957  | 9.6727  | 10.0317 | 10.4140 | 10.7503 | 11.0866 | 11.3420 | 11.6309 | 12.0048 | 12.2562 |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 7.5286  | 7.6831  | 7.8261  | 7.9509  | 8.0717  | 8.2144  | 8.3607  | 8.4785  | 8.5978  | 8.7111  |
| 97.5% | 9.1380  | 9.3086  | 9.5312  | 9.6863  | 9.8380  | 9.9821  | 10.1686 | 10.3405 | 10.5039 | 10.6299 |
| 99%   | 11.0512 | 11.2566 | 11.5310 | 11.7812 | 11.9963 | 12.1783 | 12.3647 | 12.5397 | 12.7234 | 12.9453 |
| 99.5% | 12.5442 | 12.7985 | 13.0326 | 13.2613 | 13.4515 | 13.7046 | 13.9906 | 14.1368 | 14.3586 | 14.5248 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 8.8217  | 8.9388  | 9.0629  | 9.1548  | 9.2565  | 9.3639  | 9.4761  | 9.5736  | 9.6715  | 9.7723  |
| 97.5% | 10.7760 | 10.8989 | 11.0814 | 11.1839 | 11.2987 | 11.4582 | 11.5877 | 11.7250 | 11.8417 | 11.9635 |
| 99%   | 13.0709 | 13.2853 | 13.4271 | 13.6211 | 13.7910 | 14.0102 | 14.0963 | 14.2636 | 14.4652 | 14.6246 |
| 99.5% | 14.8210 | 15.0263 | 15.2613 | 15.4288 | 15.6348 | 15.8377 | 15.9856 | 16.1597 | 16.3104 | 16.5310 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 9.8597  | 9.9610  | 10.0430 | 10.1239 | 10.2364 | 10.3182 | 10.4022 | 10.4862 | 10.5670 | 10.6506 |
| 97.5% | 12.0831 | 12.2156 | 12.3391 | 12.4382 | 12.5360 | 12.6713 | 12.7754 | 12.8755 | 12.9837 | 13.0830 |
| 99%   | 14.7393 | 14.8997 | 15.0557 | 15.1489 | 15.2949 | 15.4359 | 15.5943 | 15.6874 | 15.8438 | 15.9781 |
| 99.5% | 16.7246 | 16.9328 | 17.0782 | 17.2314 | 17.3809 | 17.5569 | 17.7355 | 17.9022 | 18.0426 | 18.1964 |

Table 45: Fixed-b critical values for t-test in regression with intercept and linear trend and 3 regressors for the Bartlett kernel (Upper tail).

|       |         |         |         |         |         |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
| 95%   | 1.9763  | 2.5475  | 3.2170  | 3.8945  | 4.4796  | 4.8920  | 5.2035  | 5.4788  | 5.7313  | 6.0035  |
| 97.5% | 2.3764  | 3.0655  | 3.8919  | 4.7091  | 5.3762  | 5.8994  | 6.2675  | 6.5839  | 6.9264  | 7.2515  |
| 99%   | 2.8152  | 3.6834  | 4.6837  | 5.6778  | 6.4565  | 7.0856  | 7.5528  | 7.9195  | 8.3224  | 8.7127  |
| 99.5% | 3.1420  | 4.0848  | 5.2399  | 6.3122  | 7.1619  | 7.8630  | 8.4006  | 8.8442  | 9.2868  | 9.7034  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 6.2438  | 6.5045  | 6.7596  | 6.9918  | 7.2114  | 7.3980  | 7.5816  | 7.7803  | 7.9633  | 8.1388  |
| 97.5% | 7.5469  | 7.8545  | 8.1612  | 8.4438  | 8.7010  | 8.9314  | 9.1652  | 9.4041  | 9.6173  | 9.8457  |
| 99%   | 9.1358  | 9.4905  | 9.8339  | 10.2094 | 10.5231 | 10.7882 | 11.1463 | 11.4295 | 11.6537 | 11.9657 |
| 99.5% | 10.2277 | 10.6009 | 10.9704 | 11.4124 | 11.7703 | 12.0791 | 12.4674 | 12.6872 | 13.0492 | 13.4145 |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 8.3091  | 8.4627  | 8.6346  | 8.7755  | 8.9277  | 9.0627  | 9.2109  | 9.3504  | 9.4827  | 9.6247  |
| 97.5% | 10.0655 | 10.2752 | 10.4355 | 10.6300 | 10.8273 | 11.0126 | 11.2105 | 11.3608 | 11.5249 | 11.6837 |
| 99%   | 12.1930 | 12.4932 | 12.6899 | 12.9543 | 13.1526 | 13.4075 | 13.6189 | 13.8650 | 14.0421 | 14.2626 |
| 99.5% | 13.6384 | 13.9071 | 14.2008 | 14.5036 | 14.8047 | 14.9740 | 15.2755 | 15.4315 | 15.6580 | 15.9789 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 9.7420  | 9.8689  | 10.0078 | 10.1122 | 10.2331 | 10.3357 | 10.4346 | 10.5504 | 10.6771 | 10.7897 |
| 97.5% | 11.8574 | 12.0292 | 12.1780 | 12.3100 | 12.4707 | 12.6076 | 12.7388 | 12.9089 | 13.0620 | 13.1629 |
| 99%   | 14.4568 | 14.5916 | 14.8376 | 15.0423 | 15.2601 | 15.4121 | 15.5861 | 15.7188 | 15.8988 | 16.0903 |
| 99.5% | 16.2125 | 16.5109 | 16.6456 | 16.8165 | 17.0697 | 17.3379 | 17.5585 | 17.7438 | 17.9060 | 18.1556 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 10.8716 | 10.9898 | 11.0838 | 11.1902 | 11.2833 | 11.3813 | 11.4727 | 11.5785 | 11.6725 | 11.7606 |
| 97.5% | 13.3102 | 13.4588 | 13.5672 | 13.7026 | 13.8061 | 13.9534 | 14.0781 | 14.2004 | 14.3046 | 14.4264 |
| 99%   | 16.2849 | 16.4514 | 16.6257 | 16.7611 | 16.8833 | 17.0692 | 17.1930 | 17.3548 | 17.5329 | 17.6785 |
| 99.5% | 18.2841 | 18.4972 | 18.7158 | 18.8622 | 19.0510 | 19.2488 | 19.3853 | 19.6208 | 19.7921 | 19.9489 |

Table 46: Fixed-b critical values for t-test in regression with intercept and linear trend and 4 regressors for the Bartlett kernel (Upper tail).



## 4.2 Wald Test

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 3.0706   | 3.7566   | 4.6634   | 5.8027   | 7.1895   | 8.8472   | 10.7362  | 12.7990  | 14.9079  | 16.9572  |
| 95%   | 4.3996   | 5.4283   | 6.7613   | 8.5192   | 10.6067  | 13.1136  | 15.9494  | 18.9280  | 22.0347  | 24.9139  |
| 97.5% | 5.7783   | 7.2098   | 9.0617   | 11.4776  | 14.4707  | 17.8177  | 21.6143  | 25.8696  | 29.7346  | 33.8889  |
| 99%   | 7.7300   | 9.7645   | 12.3984  | 15.7180  | 19.9189  | 24.9795  | 30.4061  | 36.2592  | 41.4645  | 46.9340  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 18.8755  | 20.5939  | 22.0813  | 23.5408  | 24.6394  | 25.8092  | 26.8854  | 27.8473  | 28.8708  | 29.9036  |
| 95%   | 27.6250  | 30.0540  | 32.2964  | 34.5322  | 36.3441  | 37.9241  | 39.4918  | 41.0986  | 42.8097  | 44.2786  |
| 97.5% | 37.4908  | 41.0053  | 44.1582  | 47.0068  | 49.6989  | 51.9799  | 53.9088  | 55.8686  | 57.9685  | 60.6546  |
| 99%   | 51.8899  | 56.2729  | 60.1960  | 64.1578  | 67.8264  | 71.3899  | 74.7626  | 77.6315  | 80.3233  | 83.6870  |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 31.0931  | 32.1151  | 33.3099  | 34.5180  | 35.8134  | 37.0842  | 38.3767  | 39.6147  | 40.8657  | 42.1464  |
| 95%   | 45.9606  | 47.7435  | 49.7138  | 51.6425  | 53.6202  | 55.5605  | 57.4032  | 59.1680  | 60.6674  | 62.6566  |
| 97.5% | 62.9991  | 65.3487  | 67.8253  | 70.5789  | 73.5473  | 76.0903  | 78.8672  | 81.2371  | 83.7916  | 86.1970  |
| 99%   | 87.4960  | 91.3669  | 94.4398  | 97.7915  | 101.8856 | 106.6043 | 110.2586 | 113.1433 | 116.3214 | 120.3883 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 43.3469  | 44.4685  | 45.4679  | 46.5188  | 47.5601  | 48.4696  | 49.4730  | 50.3175  | 51.3652  | 52.4240  |
| 95%   | 64.5713  | 66.3433  | 67.9581  | 69.5461  | 71.3001  | 72.7653  | 74.6302  | 75.9018  | 77.2452  | 78.6307  |
| 97.5% | 88.9741  | 91.1664  | 93.5189  | 95.7083  | 97.9314  | 100.6283 | 102.7005 | 104.9160 | 106.9517 | 109.0821 |
| 99%   | 123.2482 | 127.0299 | 130.9840 | 134.1660 | 137.6124 | 140.2034 | 142.5574 | 145.8812 | 148.6817 | 151.8460 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 53.4819  | 54.4585  | 55.4444  | 56.5498  | 57.7011  | 58.6845  | 59.6335  | 60.5882  | 61.5515  | 62.4982  |
| 95%   | 80.3570  | 82.1059  | 83.7768  | 85.2671  | 87.1377  | 88.8343  | 90.0938  | 91.6176  | 93.3178  | 94.8430  |
| 97.5% | 111.0805 | 113.5464 | 116.1214 | 118.2538 | 120.8007 | 122.7847 | 125.1449 | 127.5907 | 129.7616 | 132.0959 |
| 99%   | 155.2590 | 158.5123 | 162.4876 | 165.2992 | 168.7433 | 171.3094 | 174.6383 | 178.1951 | 181.5725 | 184.5740 |

Table 47: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 1 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 3.3083   | 4.4990   | 6.1592   | 8.3419   | 10.9959  | 14.0005  | 17.0615  | 19.8230  | 22.2395  | 24.4374  |
| 95%   | 4.7333   | 6.4931   | 8.9690   | 12.2631  | 16.2744  | 20.5228  | 24.9339  | 29.0319  | 32.5833  | 35.5399  |
| 97.5% | 6.2344   | 8.6389   | 11.9933  | 16.4847  | 21.8418  | 27.7375  | 33.4981  | 38.9235  | 43.5955  | 47.6887  |
| 99%   | 8.3447   | 11.6174  | 16.1539  | 22.2159  | 29.6433  | 38.0384  | 45.4670  | 52.8301  | 58.8320  | 65.1123  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 26.2585  | 27.9276  | 29.4441  | 31.1701  | 32.8164  | 34.7110  | 36.4572  | 38.4447  | 40.2703  | 42.2257  |
| 95%   | 38.4074  | 40.9720  | 43.2083  | 45.6761  | 48.3775  | 51.0386  | 53.8768  | 56.7465  | 59.5063  | 62.3507  |
| 97.5% | 51.4024  | 54.9936  | 58.4826  | 61.6591  | 64.9583  | 68.5129  | 72.5090  | 76.4345  | 80.7048  | 84.6720  |
| 99%   | 69.8638  | 74.4511  | 79.7242  | 84.0590  | 89.2442  | 93.2940  | 98.7282  | 104.6036 | 110.5854 | 115.9919 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 43.9879  | 45.7669  | 47.6658  | 49.2858  | 51.0212  | 52.5850  | 54.1371  | 55.7368  | 57.2566  | 58.8111  |
| 95%   | 65.2219  | 67.6804  | 70.4456  | 73.2209  | 75.7654  | 78.1040  | 80.2890  | 82.6189  | 85.3250  | 87.8158  |
| 97.5% | 88.6305  | 91.9922  | 96.0272  | 98.9023  | 102.4921 | 105.9041 | 110.1457 | 113.6971 | 116.7101 | 120.2909 |
| 99%   | 121.1550 | 125.1425 | 130.8485 | 135.9306 | 140.4879 | 144.4925 | 149.4711 | 155.5658 | 159.0474 | 164.0470 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 60.4164  | 62.0542  | 63.7994  | 65.1866  | 66.7171  | 68.3151  | 69.6575  | 71.2396  | 72.6723  | 74.3120  |
| 95%   | 90.3987  | 92.4824  | 95.0049  | 97.5791  | 99.8148  | 102.3461 | 104.4850 | 106.4651 | 108.7545 | 111.2573 |
| 97.5% | 122.9558 | 126.3246 | 130.1684 | 133.0026 | 136.9226 | 140.0582 | 143.2908 | 146.1665 | 149.1478 | 152.6809 |
| 99%   | 169.3015 | 173.4173 | 176.5609 | 182.4811 | 185.6558 | 190.8759 | 197.1984 | 200.7385 | 204.4750 | 209.5706 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 75.6009  | 77.1623  | 78.3638  | 79.6394  | 81.1092  | 82.5442  | 83.9742  | 85.2853  | 86.6457  | 88.0455  |
| 95%   | 113.2360 | 115.5621 | 117.6115 | 120.0477 | 122.2051 | 124.4399 | 126.6338 | 128.7837 | 131.0887 | 133.2169 |
| 97.5% | 155.0116 | 158.3167 | 161.1454 | 164.1382 | 167.8878 | 170.5902 | 174.2908 | 176.9581 | 179.8594 | 183.0118 |
| 99%   | 214.5091 | 217.8003 | 222.1010 | 226.4649 | 231.0791 | 234.4925 | 239.7939 | 243.7795 | 248.1732 | 252.6181 |

Table 48: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 2 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 5.6411   | 7.7234   | 10.6894  | 14.5597  | 19.2820  | 24.4017  | 29.6154  | 34.4730  | 38.7281  | 42.3781  |
| 95%   | 7.4547   | 10.3540  | 14.4031  | 19.6807  | 26.1287  | 33.1548  | 40.1581  | 46.5764  | 52.1798  | 57.0175  |
| 97.5% | 9.3033   | 13.0344  | 18.4027  | 25.2381  | 33.5143  | 42.4917  | 50.9477  | 59.1426  | 66.3919  | 72.8694  |
| 99%   | 11.7511  | 16.6054  | 23.6384  | 32.9315  | 43.9124  | 55.3280  | 66.1651  | 76.3058  | 85.6530  | 93.4144  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 45.4927  | 48.4047  | 51.1613  | 54.1119  | 57.1486  | 60.3468  | 63.7649  | 67.1589  | 70.3705  | 73.9087  |
| 95%   | 61.4277  | 65.4418  | 69.3363  | 73.7868  | 77.9512  | 82.1412  | 86.7115  | 91.8369  | 96.2824  | 100.8046 |
| 97.5% | 78.4673  | 83.8181  | 88.5784  | 93.7530  | 99.6944  | 105.4241 | 111.3598 | 117.4086 | 123.4626 | 129.1336 |
| 99%   | 101.1713 | 108.5272 | 116.0617 | 122.6885 | 129.6594 | 137.1677 | 146.1463 | 154.2740 | 161.7639 | 168.9426 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 77.1611  | 79.9262  | 83.0860  | 86.1788  | 89.1501  | 91.9446  | 94.9192  | 97.7820  | 100.6430 | 103.5416 |
| 95%   | 105.1396 | 109.6967 | 113.7387 | 118.0734 | 122.0250 | 125.9016 | 130.2053 | 134.1662 | 138.4951 | 141.7638 |
| 97.5% | 134.9450 | 141.4807 | 147.1255 | 152.3236 | 157.0399 | 163.3800 | 168.0502 | 173.8376 | 178.6523 | 183.9412 |
| 99%   | 176.4219 | 184.5871 | 192.1595 | 199.7618 | 206.8344 | 212.7374 | 221.4097 | 228.4506 | 235.0375 | 241.3000 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 106.2349 | 108.9724 | 111.8513 | 114.7231 | 117.4255 | 119.9433 | 122.7599 | 125.4139 | 128.4512 | 130.7553 |
| 95%   | 145.8890 | 150.4334 | 154.3085 | 158.0503 | 162.5349 | 165.7707 | 169.6672 | 173.8068 | 177.7536 | 181.0108 |
| 97.5% | 189.5149 | 195.2764 | 201.2623 | 205.5199 | 209.9958 | 215.7045 | 221.1418 | 226.1787 | 230.5160 | 235.1425 |
| 99%   | 248.6839 | 256.9583 | 262.6549 | 270.5763 | 277.1887 | 283.3799 | 291.6714 | 296.6834 | 303.0543 | 309.9090 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 133.2122 | 135.4224 | 138.2872 | 141.0630 | 143.5194 | 145.8654 | 148.5165 | 151.1931 | 153.6498 | 156.0474 |
| 95%   | 184.1769 | 187.9460 | 191.7145 | 195.6823 | 199.4337 | 202.9816 | 206.9904 | 210.6201 | 213.7135 | 217.2674 |
| 97.5% | 240.9533 | 245.9016 | 250.6452 | 256.0439 | 261.0361 | 265.5234 | 270.9215 | 275.6148 | 280.7035 | 285.5744 |
| 99%   | 316.5713 | 321.5558 | 329.9721 | 336.8931 | 343.6156 | 349.1730 | 356.5224 | 363.3778 | 369.2853 | 375.7224 |

Table 49: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and linear trend and 2 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 3.6076   | 5.4178   | 8.0827   | 11.5933  | 15.6102  | 19.4411  | 22.7935  | 25.4835  | 27.9353  | 30.1687  |
| 95%   | 5.1791   | 7.8211   | 11.7869  | 16.9455  | 22.6991  | 28.2815  | 33.1956  | 37.2342  | 40.5732  | 43.8916  |
| 97.5% | 6.8585   | 10.4261  | 15.8681  | 22.8328  | 30.3958  | 37.7688  | 44.3670  | 49.5836  | 54.5377  | 58.9423  |
| 99%   | 9.1040   | 14.2535  | 21.6734  | 31.3230  | 41.8403  | 51.7545  | 60.4552  | 68.1405  | 73.7983  | 81.1603  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 32.4037  | 34.8860  | 37.4893  | 39.7765  | 42.4544  | 45.0605  | 47.5120  | 49.9996  | 52.2363  | 54.4913  |
| 95%   | 47.2376  | 50.8717  | 54.5029  | 58.2889  | 62.2043  | 65.9927  | 69.8808  | 73.2200  | 76.5802  | 80.1501  |
| 97.5% | 63.4049  | 68.3236  | 73.9455  | 79.0713  | 83.7056  | 89.2943  | 94.4736  | 99.1783  | 103.9669 | 108.7996 |
| 99%   | 87.6850  | 94.3915  | 101.3723 | 108.6253 | 115.8888 | 124.0885 | 130.2190 | 137.3100 | 144.3907 | 150.8674 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 56.7381  | 59.0311  | 61.2835  | 63.4260  | 65.6411  | 67.5574  | 70.1021  | 71.9483  | 73.9167  | 75.9911  |
| 95%   | 83.5503  | 86.7490  | 90.3437  | 93.3650  | 96.7251  | 100.3087 | 103.0880 | 105.9414 | 109.5471 | 112.8894 |
| 97.5% | 113.2149 | 117.4463 | 122.3962 | 126.9393 | 132.2382 | 136.1720 | 140.6274 | 145.3481 | 150.0801 | 154.3335 |
| 99%   | 156.7064 | 161.7013 | 169.5527 | 174.9847 | 183.0064 | 188.8305 | 194.5728 | 201.3221 | 206.7790 | 212.9454 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 78.0445  | 80.3525  | 82.3574  | 84.2326  | 86.2656  | 88.0532  | 90.0704  | 91.8572  | 93.6372  | 95.8848  |
| 95%   | 115.9560 | 118.6824 | 121.8444 | 124.7716 | 127.5805 | 130.9990 | 134.0831 | 137.2311 | 139.8624 | 143.1112 |
| 97.5% | 157.9984 | 162.5689 | 166.9205 | 171.5616 | 175.3716 | 179.6447 | 184.5156 | 187.6375 | 192.4551 | 196.2887 |
| 99%   | 218.9323 | 225.0571 | 231.8467 | 238.0924 | 245.1584 | 249.0110 | 254.4227 | 260.6506 | 267.3782 | 272.4231 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 97.7445  | 99.6176  | 101.4025 | 103.0357 | 104.8476 | 106.6500 | 108.4987 | 110.1738 | 112.0615 | 113.7849 |
| 95%   | 145.7322 | 148.6145 | 151.4120 | 154.0122 | 156.9914 | 160.2290 | 163.1121 | 165.4567 | 168.2318 | 171.0781 |
| 97.5% | 200.5096 | 203.6911 | 208.5238 | 211.8104 | 216.4297 | 220.4340 | 224.6774 | 228.7519 | 232.3212 | 236.1243 |
| 99%   | 277.7358 | 284.3803 | 290.5192 | 295.0953 | 301.0061 | 305.9916 | 311.0812 | 318.4622 | 324.6441 | 329.8504 |

Table 50: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 3 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 6.1810   | 9.3933   | 14.0930  | 20.3153  | 27.1820  | 33.6916  | 39.5246  | 44.3304  | 48.6439  | 52.6057  |
| 95%   | 8.1453   | 12.4377  | 18.8614  | 27.1764  | 36.2966  | 45.0991  | 52.8638  | 59.3241  | 64.8536  | 70.2602  |
| 97.5% | 10.2049  | 15.6854  | 23.8639  | 34.7301  | 46.2184  | 57.2640  | 66.6478  | 74.9983  | 82.5762  | 89.0995  |
| 99%   | 12.9069  | 20.3809  | 31.0586  | 45.2127  | 59.7146  | 73.9379  | 86.3020  | 97.6290  | 106.9096 | 115.7236 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 56.6547  | 60.6987  | 65.3171  | 69.6865  | 74.6113  | 79.0732  | 83.2817  | 87.5259  | 91.8861  | 95.8711  |
| 95%   | 75.8873  | 81.4873  | 87.3276  | 93.8301  | 100.0082 | 105.9945 | 112.3857 | 118.0320 | 123.2305 | 129.1753 |
| 97.5% | 95.7765  | 103.7787 | 111.8100 | 120.2329 | 127.6043 | 135.4504 | 143.2243 | 151.1892 | 158.7664 | 165.9787 |
| 99%   | 126.2551 | 136.2894 | 146.6063 | 156.7726 | 166.6477 | 177.4431 | 187.5815 | 197.9374 | 207.0268 | 216.5020 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 99.7639  | 103.7095 | 107.9340 | 111.5879 | 115.7191 | 119.4820 | 123.5753 | 127.2655 | 130.8326 | 134.2980 |
| 95%   | 134.9424 | 140.2181 | 145.5879 | 151.1435 | 157.0664 | 162.4475 | 168.3795 | 172.7753 | 177.8481 | 183.2954 |
| 97.5% | 172.7150 | 179.8387 | 188.1351 | 194.5999 | 201.1688 | 208.5001 | 215.5558 | 222.8331 | 229.1707 | 236.7929 |
| 99%   | 229.1311 | 237.5539 | 247.0383 | 255.3961 | 266.6656 | 275.5523 | 283.8174 | 295.2114 | 303.1765 | 313.7159 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 138.4582 | 142.0643 | 145.8701 | 149.1173 | 152.8050 | 156.2117 | 160.0587 | 163.2847 | 166.8212 | 170.7164 |
| 95%   | 189.1962 | 193.6921 | 198.2691 | 203.6309 | 208.9563 | 214.4186 | 220.0222 | 224.9513 | 228.9842 | 234.2792 |
| 97.5% | 243.7469 | 249.9030 | 256.8047 | 262.8723 | 271.6459 | 277.5419 | 283.6854 | 289.4222 | 296.4015 | 303.8500 |
| 99%   | 321.3018 | 328.8175 | 339.8331 | 347.9177 | 359.8873 | 366.3305 | 375.0682 | 383.5336 | 393.0714 | 402.1596 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 173.5761 | 177.2306 | 180.6698 | 183.9023 | 187.1668 | 190.3769 | 193.7720 | 197.1837 | 200.8130 | 204.0551 |
| 95%   | 239.4907 | 244.4505 | 248.6467 | 252.9555 | 257.8422 | 263.3302 | 267.3978 | 271.7839 | 276.4004 | 281.3154 |
| 97.5% | 310.3906 | 317.1620 | 321.4483 | 328.1474 | 335.1750 | 341.1950 | 347.8764 | 354.3432 | 359.9536 | 366.4480 |
| 99%   | 410.9183 | 419.4925 | 429.2854 | 436.3450 | 444.4043 | 453.4205 | 461.8820 | 470.8407 | 478.2129 | 487.7840 |

Table 51: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and linear trend and 3 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 8.4595   | 12.8704  | 19.4047  | 27.9909  | 37.5115  | 46.5186  | 54.4835  | 61.0004  | 66.8547  | 72.3134  |
| 95%   | 10.7214  | 16.3701  | 25.0664  | 36.2155  | 48.2706  | 59.6246  | 69.9410  | 78.5513  | 85.9227  | 93.1863  |
| 97.5% | 12.9736  | 20.1365  | 30.8597  | 44.7443  | 59.6514  | 73.7097  | 85.4418  | 96.0381  | 105.8900 | 114.2329 |
| 99%   | 15.9550  | 25.0620  | 38.7556  | 56.1168  | 74.7364  | 91.9195  | 107.0016 | 120.4383 | 133.4987 | 143.6596 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 78.2153  | 83.9046  | 90.0089  | 96.5647  | 102.8287 | 109.0944 | 114.8682 | 121.2520 | 126.7900 | 132.7131 |
| 95%   | 100.4343 | 108.0470 | 116.2028 | 124.8357 | 133.1273 | 141.3391 | 149.4998 | 157.5440 | 164.9996 | 172.8144 |
| 97.5% | 123.7960 | 133.6384 | 143.9742 | 154.1773 | 165.0567 | 174.6777 | 185.0760 | 194.3605 | 204.1721 | 213.3487 |
| 99%   | 156.9405 | 167.9809 | 180.5512 | 196.1323 | 208.9385 | 221.7119 | 234.3646 | 245.1486 | 258.0132 | 270.2946 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 138.1931 | 143.8577 | 149.8113 | 155.0731 | 160.1604 | 165.9425 | 171.4052 | 176.4172 | 181.9509 | 187.2374 |
| 95%   | 179.4396 | 186.8934 | 194.7254 | 202.0338 | 209.7402 | 216.5059 | 224.2058 | 231.2957 | 238.8024 | 245.2884 |
| 97.5% | 223.0339 | 232.8901 | 241.5143 | 251.6157 | 261.2128 | 269.3672 | 278.0825 | 287.9557 | 297.0512 | 305.2031 |
| 99%   | 284.3026 | 295.2814 | 306.4149 | 320.6563 | 331.5703 | 342.1924 | 353.8832 | 364.7809 | 377.5559 | 390.6459 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 192.4662 | 198.0069 | 203.0011 | 207.8032 | 213.1869 | 218.0451 | 222.9650 | 227.9298 | 233.1281 | 238.0272 |
| 95%   | 252.4135 | 259.3439 | 266.2083 | 273.0580 | 279.5767 | 286.6514 | 293.3813 | 300.2125 | 306.6679 | 313.1474 |
| 97.5% | 312.2904 | 323.4827 | 331.5491 | 340.8676 | 350.1431 | 357.7869 | 365.2777 | 373.8617 | 383.7353 | 391.7865 |
| 99%   | 402.9466 | 412.5417 | 421.5767 | 435.0386 | 447.2648 | 458.5099 | 470.4936 | 481.0244 | 490.8791 | 502.8104 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 243.1726 | 248.0352 | 252.8190 | 257.4521 | 262.3173 | 267.0351 | 272.0115 | 276.8074 | 281.1583 | 285.9577 |
| 95%   | 319.9821 | 327.2458 | 333.5432 | 339.7303 | 346.2620 | 352.3971 | 359.5015 | 366.6709 | 372.6770 | 378.8974 |
| 97.5% | 399.6320 | 408.6894 | 417.6132 | 424.6044 | 433.6919 | 442.1073 | 449.8619 | 458.3992 | 467.0363 | 474.9311 |
| 99%   | 513.9028 | 525.3963 | 535.1178 | 545.0595 | 557.8645 | 568.5691 | 578.3171 | 589.5906 | 600.3723 | 611.0900 |

Table 52: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and linear trend and 3 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 3.9231   | 6.4822   | 10.4560  | 15.2887  | 20.0331  | 23.9104  | 27.1424  | 30.0422  | 32.9809  | 35.8309  |
| 95%   | 5.6252   | 9.3663   | 15.1301  | 22.1692  | 29.0012  | 34.7316  | 39.2722  | 43.4304  | 47.8666  | 52.3083  |
| 97.5% | 7.4170   | 12.4543  | 20.2216  | 29.4738  | 38.5305  | 46.0932  | 52.1677  | 58.0138  | 63.7221  | 69.6700  |
| 99%   | 9.9834   | 17.0391  | 27.7903  | 40.4823  | 52.6617  | 62.4000  | 70.7533  | 79.0340  | 86.7515  | 95.2858  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 39.1312  | 42.3513  | 45.5280  | 49.0476  | 52.0312  | 54.7869  | 57.4826  | 60.5089  | 63.3763  | 66.1332  |
| 95%   | 57.0976  | 61.5954  | 66.0971  | 70.7513  | 75.1132  | 79.7060  | 84.1947  | 88.4457  | 92.0602  | 96.1140  |
| 97.5% | 76.2266  | 82.6185  | 89.0612  | 95.2927  | 101.2285 | 106.5749 | 112.6695 | 118.8579 | 124.3237 | 130.0236 |
| 99%   | 104.2113 | 112.5418 | 121.3519 | 129.5151 | 138.8563 | 147.5190 | 154.9246 | 163.5417 | 170.0893 | 179.7977 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 68.9591  | 71.4677  | 74.4440  | 77.0611  | 79.5158  | 82.2607  | 84.8995  | 87.4280  | 89.9084  | 92.7001  |
| 95%   | 100.1587 | 104.3490 | 108.7733 | 112.9205 | 116.4712 | 120.0377 | 124.2666 | 128.2341 | 131.7861 | 135.6453 |
| 97.5% | 135.6713 | 141.1086 | 147.2375 | 152.3850 | 157.2933 | 163.0412 | 168.5173 | 174.0619 | 179.5455 | 184.3232 |
| 99%   | 186.3179 | 194.9335 | 201.9378 | 210.5812 | 217.5693 | 226.0492 | 231.5079 | 240.8001 | 247.8720 | 256.8581 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 94.7895  | 97.4396  | 99.8605  | 102.3587 | 104.6580 | 106.7723 | 109.2336 | 111.6895 | 114.0150 | 116.0582 |
| 95%   | 139.1294 | 142.8405 | 146.6513 | 150.2992 | 154.3564 | 157.8343 | 161.0352 | 164.5572 | 168.3244 | 172.0471 |
| 97.5% | 189.2982 | 195.1746 | 199.0625 | 205.8032 | 210.8518 | 214.9847 | 219.7091 | 224.5081 | 230.0091 | 235.5408 |
| 99%   | 263.8465 | 269.6268 | 276.8161 | 283.5852 | 290.7200 | 299.5060 | 307.3373 | 312.5022 | 319.1163 | 326.9214 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 118.3337 | 120.7123 | 123.1485 | 125.2626 | 127.4723 | 129.4561 | 131.9579 | 134.0539 | 135.9371 | 138.3900 |
| 95%   | 175.2868 | 178.7643 | 182.1879 | 185.6829 | 188.7224 | 192.4038 | 195.9281 | 199.1311 | 202.3341 | 205.5771 |
| 97.5% | 241.1214 | 244.2628 | 249.0630 | 254.7103 | 259.4624 | 264.0936 | 268.9932 | 273.6495 | 278.0184 | 282.6930 |
| 99%   | 336.6046 | 340.4859 | 345.2817 | 355.5832 | 363.1716 | 368.9123 | 376.4020 | 382.4492 | 389.8334 | 396.8674 |

Table 53: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 4 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 6.7601   | 11.2779  | 18.0775  | 26.5983  | 34.7668  | 41.6479  | 47.3183  | 52.4410  | 57.4449  | 62.8013  |
| 95%   | 8.9246   | 15.0799  | 24.3719  | 35.6276  | 46.4953  | 55.6874  | 63.3489  | 70.1220  | 76.5650  | 84.1736  |
| 97.5% | 11.1697  | 19.0132  | 30.8239  | 45.1058  | 58.5159  | 70.0278  | 79.6925  | 87.9769  | 96.8271  | 106.4753 |
| 99%   | 14.1135  | 24.2350  | 39.3955  | 57.5717  | 74.7446  | 88.7844  | 101.5514 | 112.7630 | 124.1825 | 136.3180 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 68.5891  | 74.1872  | 79.8108  | 85.6700  | 91.1774  | 96.2181  | 101.4636 | 106.4887 | 111.6407 | 116.3573 |
| 95%   | 91.7268  | 99.7316  | 107.8224 | 115.2063 | 122.0993 | 129.4776 | 136.0824 | 143.7783 | 151.0307 | 157.7665 |
| 97.5% | 116.6163 | 125.9865 | 135.8496 | 145.0782 | 155.2121 | 164.7295 | 172.7855 | 182.3439 | 191.3497 | 199.2468 |
| 99%   | 148.8107 | 160.7189 | 174.5221 | 187.3268 | 199.6723 | 209.9579 | 221.7918 | 234.2740 | 244.9119 | 257.9000 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 121.7047 | 126.4091 | 131.4490 | 136.4514 | 141.5490 | 145.7735 | 150.4255 | 155.1742 | 159.8706 | 164.2594 |
| 95%   | 164.0403 | 170.2723 | 177.3846 | 184.7077 | 190.8907 | 197.7590 | 203.9058 | 210.3167 | 216.8342 | 223.0022 |
| 97.5% | 208.4416 | 217.4962 | 226.9476 | 234.6148 | 243.4564 | 251.1764 | 260.0513 | 268.7142 | 277.1717 | 285.6900 |
| 99%   | 268.8847 | 279.5760 | 290.3795 | 301.7737 | 313.2827 | 324.0099 | 334.5478 | 345.3957 | 357.8656 | 366.4128 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 168.7412 | 173.2922 | 177.8986 | 181.9482 | 186.6478 | 190.7048 | 195.1491 | 199.3443 | 203.5683 | 207.9888 |
| 95%   | 229.7022 | 236.1470 | 242.2051 | 248.9108 | 253.7014 | 260.6622 | 266.4419 | 273.1234 | 279.3348 | 284.9384 |
| 97.5% | 293.0818 | 300.9163 | 309.5054 | 318.0564 | 325.6622 | 333.2850 | 342.2446 | 349.7916 | 357.9037 | 365.9708 |
| 99%   | 379.1202 | 389.4359 | 399.8091 | 411.1840 | 421.7831 | 433.5014 | 443.8360 | 451.1443 | 464.4226 | 474.1065 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 211.9977 | 216.3836 | 220.3602 | 224.8037 | 228.9279 | 232.4841 | 236.8075 | 240.9740 | 245.0972 | 249.3465 |
| 95%   | 290.4699 | 297.3042 | 303.1019 | 308.6036 | 315.2966 | 320.1667 | 326.3271 | 332.0092 | 338.0493 | 343.8483 |
| 97.5% | 372.5602 | 381.0752 | 387.6696 | 395.9970 | 404.6406 | 410.8958 | 417.7149 | 426.3218 | 432.9823 | 441.2533 |
| 99%   | 483.7342 | 496.0212 | 505.7952 | 515.1328 | 523.0842 | 534.4587 | 546.8954 | 556.4702 | 566.1935 | 575.9284 |

Table 54: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and linear trend and 4 regressors for the Bartlett kernel.



|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 9.1440   | 15.3088  | 24.7918  | 36.2594  | 47.3059  | 56.6619  | 64.4004  | 71.4102  | 78.1603  | 85.7259  |
| 95%   | 11.6461  | 19.6500  | 31.8130  | 46.6182  | 60.8361  | 72.7056  | 82.3315  | 91.0440  | 100.3948 | 110.5433 |
| 97.5% | 14.0934  | 24.1543  | 39.3533  | 57.3154  | 74.9262  | 89.2516  | 101.1493 | 111.5962 | 123.4518 | 135.9186 |
| 99%   | 17.4829  | 30.3207  | 49.4198  | 72.1117  | 93.7822  | 111.1252 | 126.7002 | 141.1184 | 156.0226 | 171.2005 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 93.2319  | 101.6197 | 109.3182 | 117.0396 | 124.5892 | 131.4550 | 138.4179 | 145.1552 | 152.8501 | 159.8748 |
| 95%   | 120.4784 | 130.6680 | 140.6296 | 150.6231 | 160.2492 | 169.5549 | 179.0589 | 188.1988 | 197.8826 | 206.5362 |
| 97.5% | 148.6913 | 160.4909 | 173.6428 | 185.2568 | 197.5258 | 209.9767 | 221.7993 | 234.1480 | 244.3125 | 255.7310 |
| 99%   | 187.7921 | 201.9605 | 219.8549 | 235.4046 | 250.2777 | 263.9677 | 280.3287 | 294.0818 | 308.3938 | 322.6293 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 166.4327 | 173.3950 | 179.9804 | 186.7111 | 193.3709 | 199.9669 | 206.5596 | 212.5608 | 218.8263 | 225.7422 |
| 95%   | 215.7782 | 224.5096 | 233.5960 | 242.9779 | 250.7077 | 259.5550 | 268.0832 | 277.2165 | 286.0887 | 294.8933 |
| 97.5% | 267.4016 | 278.8076 | 290.0167 | 300.3935 | 311.6721 | 323.9330 | 334.0368 | 343.6973 | 354.5305 | 367.1418 |
| 99%   | 339.2924 | 354.8784 | 366.8481 | 381.5984 | 397.4784 | 410.0079 | 423.5654 | 439.7667 | 451.0983 | 465.9661 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 231.7317 | 238.6679 | 243.6888 | 250.2975 | 256.9827 | 263.1352 | 268.5870 | 274.8823 | 280.7008 | 286.4994 |
| 95%   | 302.5907 | 310.5081 | 319.3759 | 327.2895 | 336.6654 | 344.9505 | 352.4081 | 359.3632 | 367.9574 | 377.7579 |
| 97.5% | 376.5862 | 386.5542 | 395.8485 | 407.7770 | 417.1056 | 428.1522 | 438.6816 | 449.1255 | 459.3137 | 468.3865 |
| 99%   | 480.0640 | 491.8529 | 507.2003 | 520.1233 | 535.9080 | 547.9917 | 562.5023 | 573.9185 | 588.4169 | 600.4972 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 292.3598 | 298.6872 | 304.9298 | 310.0589 | 315.9930 | 321.7218 | 327.9254 | 333.4144 | 339.2653 | 344.6597 |
| 95%   | 385.3163 | 391.8733 | 400.4595 | 408.2134 | 415.9648 | 423.6486 | 432.0891 | 439.2648 | 446.8212 | 454.6191 |
| 97.5% | 479.8852 | 489.6038 | 499.5986 | 507.1359 | 518.3281 | 529.0618 | 539.4966 | 548.7972 | 559.1048 | 568.4399 |
| 99%   | 614.1528 | 626.3388 | 640.0999 | 654.3106 | 667.3361 | 681.6936 | 691.9349 | 704.4815 | 718.8889 | 731.8139 |

Table 55: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and linear trend and 4 regressors for the Bartlett kernel.

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 90%   | 11.4685  | 19.2760  | 31.1389  | 45.7738  | 59.6492  | 71.3838  | 80.9512  | 89.6948  | 98.7613  | 108.2295 |
| 95%   | 14.2786  | 24.1941  | 39.2600  | 57.3852  | 74.8191  | 89.6979  | 101.8018 | 112.8858 | 124.2113 | 136.3099 |
| 97.5% | 17.0542  | 29.2623  | 47.5839  | 69.5276  | 90.0981  | 107.5612 | 122.3815 | 136.0977 | 150.4147 | 165.7517 |
| 99%   | 20.4891  | 35.7035  | 58.6012  | 85.3357  | 110.4060 | 131.2204 | 150.2840 | 166.5893 | 184.6402 | 201.8679 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 90%   | 118.2671 | 127.9043 | 138.2571 | 148.0652 | 157.2262 | 166.1755 | 175.2045 | 184.5772 | 193.2429 | 202.5041 |
| 95%   | 148.5212 | 160.8749 | 174.0068 | 186.9663 | 198.6721 | 209.8362 | 221.2426 | 233.8551 | 245.9857 | 256.3927 |
| 97.5% | 180.7617 | 195.3524 | 210.8025 | 227.0949 | 241.0458 | 256.0357 | 269.3349 | 283.1361 | 297.5731 | 311.9939 |
| 99%   | 221.4247 | 241.0438 | 259.5859 | 278.7819 | 296.9394 | 313.6267 | 332.5336 | 350.1403 | 368.5162 | 388.6478 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 90%   | 211.3001 | 220.0886 | 228.8637 | 237.3146 | 245.3477 | 254.4247 | 262.4947 | 270.8608 | 278.8055 | 287.4620 |
| 95%   | 267.8076 | 278.7497 | 289.9152 | 301.7181 | 312.7742 | 323.0353 | 334.4923 | 345.2745 | 354.6235 | 366.0637 |
| 97.5% | 326.0358 | 340.3746 | 353.9125 | 366.4449 | 379.3434 | 396.5217 | 408.4211 | 422.7823 | 434.3139 | 449.0275 |
| 99%   | 404.4301 | 416.8775 | 438.5109 | 455.6005 | 472.7168 | 489.0409 | 505.6868 | 521.8317 | 540.3901 | 554.3858 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 90%   | 295.9108 | 303.8642 | 311.6528 | 319.1019 | 327.6914 | 334.9866 | 343.8048 | 350.9082 | 358.2520 | 366.5556 |
| 95%   | 376.6240 | 387.7487 | 398.5736 | 408.3989 | 417.4481 | 428.2033 | 439.4174 | 449.0127 | 459.7150 | 469.8130 |
| 97.5% | 460.9235 | 475.2526 | 487.3461 | 501.7897 | 512.8745 | 525.6540 | 540.8509 | 550.3900 | 564.6849 | 576.8199 |
| 99%   | 570.9798 | 589.7624 | 606.7300 | 619.6502 | 638.3465 | 656.7926 | 671.2396 | 685.3487 | 701.9537 | 717.3201 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 90%   | 374.3237 | 381.2958 | 389.7165 | 397.4763 | 404.4278 | 411.8912 | 419.5644 | 426.9278 | 434.5971 | 442.3414 |
| 95%   | 480.7620 | 490.5069 | 499.5075 | 509.6697 | 520.2694 | 530.5363 | 539.7752 | 549.4873 | 560.0492 | 569.7017 |
| 97.5% | 589.0669 | 601.9581 | 615.8577 | 625.4081 | 638.3497 | 650.9935 | 664.1110 | 675.5301 | 688.2648 | 699.7441 |
| 99%   | 734.7105 | 749.1915 | 765.3972 | 779.2010 | 795.7099 | 810.2934 | 827.9778 | 842.7887 | 858.5232 | 873.4325 |

Table 56: Fixed-b critical values for Wald test for 4 hypotheses in regression with intercept and linear trend and 4 regressors for the Bartlett kernel.

## 5 Parzen Kernel (Intercept and Linear Trend)

### 5.1 t-Test

|       |         |         |         |         |         |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
| 95%   | 1.7067  | 1.8407  | 1.9919  | 2.1687  | 2.3752  | 2.6138  | 2.8930  | 3.2119  | 3.5726  | 3.9813  |
| 97.5% | 2.0462  | 2.2201  | 2.4179  | 2.6497  | 2.9203  | 3.2346  | 3.5898  | 4.0016  | 4.4804  | 5.0225  |
| 99%   | 2.4697  | 2.6836  | 2.9514  | 3.2414  | 3.5942  | 3.9972  | 4.4697  | 5.0506  | 5.7083  | 6.4442  |
| 99.5% | 2.7596  | 3.0187  | 3.3233  | 3.6699  | 4.1142  | 4.6408  | 5.2346  | 5.9110  | 6.7146  | 7.5369  |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 4.4342  | 4.9340  | 5.4999  | 6.1145  | 6.7752  | 7.4554  | 8.1867  | 8.9548  | 9.7055  | 10.4409 |
| 97.5% | 5.6263  | 6.2925  | 7.0623  | 7.8698  | 8.7504  | 9.6670  | 10.6383 | 11.6283 | 12.6407 | 13.6853 |
| 99%   | 7.2329  | 8.2178  | 9.2146  | 10.2727 | 11.4863 | 12.8331 | 14.1629 | 15.5980 | 17.0990 | 18.4992 |
| 99.5% | 8.5371  | 9.6605  | 10.9120 | 12.2887 | 13.7662 | 15.3201 | 17.0406 | 18.8221 | 20.4077 | 22.0980 |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 11.1392 | 11.8820 | 12.5565 | 13.2404 | 13.8903 | 14.5033 | 15.0500 | 15.5503 | 16.0342 | 16.4557 |
| 97.5% | 14.7194 | 15.7268 | 16.7175 | 17.6858 | 18.6070 | 19.4438 | 20.2303 | 20.9706 | 21.5586 | 22.1834 |
| 99%   | 19.8560 | 21.2624 | 22.5669 | 23.8872 | 24.9504 | 26.1706 | 27.1551 | 28.1341 | 29.1875 | 30.2101 |
| 99.5% | 24.0349 | 25.8125 | 27.3926 | 28.7326 | 30.2655 | 31.7395 | 33.1059 | 34.5148 | 35.8110 | 36.8132 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 16.8529 | 17.2177 | 17.5081 | 17.8416 | 18.1221 | 18.4127 | 18.7222 | 18.9852 | 19.2864 | 19.5192 |
| 97.5% | 22.7528 | 23.2701 | 23.7753 | 24.3298 | 24.9091 | 25.4306 | 25.8690 | 26.3464 | 26.8190 | 27.2760 |
| 99%   | 31.0994 | 32.0736 | 32.8597 | 33.6486 | 34.3137 | 35.1994 | 35.9148 | 36.6788 | 37.3587 | 38.2077 |
| 99.5% | 37.7736 | 38.5856 | 39.8680 | 40.8244 | 41.9077 | 43.0360 | 44.1544 | 45.2219 | 46.2137 | 47.3529 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 19.8153 | 20.0802 | 20.3252 | 20.5769 | 20.8602 | 21.1113 | 21.4146 | 21.7353 | 21.9897 | 22.2668 |
| 97.5% | 27.6348 | 28.0848 | 28.5528 | 29.0922 | 29.5623 | 29.9675 | 30.4893 | 31.0058 | 31.5271 | 32.0195 |
| 99%   | 39.0836 | 39.8820 | 40.6284 | 41.4709 | 42.2378 | 42.8877 | 43.6192 | 44.3948 | 45.3231 | 46.1945 |
| 99.5% | 48.3717 | 49.4524 | 50.8864 | 52.0991 | 53.2529 | 54.1065 | 55.2274 | 56.3250 | 57.7017 | 58.5153 |

Table 57: Fixed-b critical values for t-test in regression with intercept and linear trend and 1 regressors for the Parzen kernel (Upper tail).

|       |         |         |         |         |         |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       | 0.02    | 0.04    | 0.06    | 0.08    | 0.10    | 0.12    | 0.14    | 0.16    | 0.18    | 0.20    |
| 95%   | 1.7628  | 1.9801  | 2.2423  | 2.5578  | 2.9417  | 3.4093  | 3.9585  | 4.5928  | 5.3530  | 6.2334  |
| 97.5% | 2.1052  | 2.3774  | 2.7075  | 3.1171  | 3.5920  | 4.1724  | 4.8922  | 5.7374  | 6.7489  | 7.8803  |
| 99%   | 2.5293  | 2.8663  | 3.2786  | 3.7964  | 4.4267  | 5.1941  | 6.1130  | 7.2319  | 8.5463  | 10.0964 |
| 99.5% | 2.7956  | 3.1800  | 3.6703  | 4.3070  | 5.0707  | 5.9863  | 7.1311  | 8.4322  | 9.9805  | 11.7516 |
|       | 0.22    | 0.24    | 0.26    | 0.28    | 0.30    | 0.32    | 0.34    | 0.36    | 0.38    | 0.40    |
| 95%   | 7.2049  | 8.2670  | 9.4019  | 10.5874 | 11.7812 | 12.9039 | 13.9938 | 14.9982 | 15.8917 | 16.7198 |
| 97.5% | 9.1855  | 10.5718 | 12.0702 | 13.6160 | 15.1389 | 16.6987 | 18.1788 | 19.6225 | 20.8556 | 22.0238 |
| 99%   | 11.8233 | 13.6390 | 15.6611 | 17.6893 | 19.7272 | 21.6734 | 23.7604 | 25.6070 | 27.4865 | 29.0879 |
| 99.5% | 13.8084 | 16.0413 | 18.4840 | 20.7956 | 23.3267 | 25.8161 | 28.0026 | 30.1448 | 32.3539 | 34.3843 |
|       | 0.42    | 0.44    | 0.46    | 0.48    | 0.50    | 0.52    | 0.54    | 0.56    | 0.58    | 0.60    |
| 95%   | 17.4527 | 18.1762 | 18.7518 | 19.2466 | 19.8030 | 20.2793 | 20.8033 | 21.3271 | 21.8219 | 22.2796 |
| 97.5% | 23.0426 | 24.0661 | 24.9690 | 25.7713 | 26.5744 | 27.3879 | 28.1667 | 28.9134 | 29.7261 | 30.5851 |
| 99%   | 30.4499 | 31.8321 | 33.0703 | 34.4200 | 35.6749 | 37.0633 | 38.1633 | 39.4243 | 40.7488 | 41.9436 |
| 99.5% | 36.1927 | 37.8882 | 39.6994 | 41.1445 | 42.6600 | 43.8821 | 45.7062 | 47.1521 | 48.6071 | 50.4344 |
|       | 0.62    | 0.64    | 0.66    | 0.68    | 0.70    | 0.72    | 0.74    | 0.76    | 0.78    | 0.80    |
| 95%   | 22.7358 | 23.2281 | 23.7213 | 24.2418 | 24.7316 | 25.1702 | 25.6644 | 26.1235 | 26.6107 | 27.1145 |
| 97.5% | 31.4346 | 32.2135 | 32.8699 | 33.6109 | 34.4727 | 35.3787 | 36.0631 | 36.9483 | 37.7601 | 38.5724 |
| 99%   | 43.1890 | 44.2024 | 45.7606 | 47.0766 | 48.3596 | 49.7352 | 50.6795 | 51.9353 | 53.4368 | 54.9001 |
| 99.5% | 52.1179 | 53.9301 | 55.7285 | 57.5075 | 59.1641 | 61.1063 | 62.9471 | 65.0775 | 66.5210 | 68.2128 |
|       | 0.82    | 0.84    | 0.86    | 0.88    | 0.90    | 0.92    | 0.94    | 0.96    | 0.98    | 1.00    |
| 95%   | 27.5858 | 27.9644 | 28.3225 | 28.7176 | 29.0526 | 29.3744 | 29.7126 | 30.0325 | 30.4514 | 30.7753 |
| 97.5% | 39.3621 | 40.1386 | 40.9140 | 41.6968 | 42.5657 | 43.4120 | 44.1674 | 44.8697 | 45.5688 | 46.2229 |
| 99%   | 56.4222 | 57.7047 | 58.9785 | 60.3558 | 61.7054 | 62.9769 | 64.3598 | 65.4857 | 66.8208 | 68.0450 |
| 99.5% | 70.2134 | 71.9399 | 74.1793 | 75.9242 | 77.4787 | 79.4264 | 81.3470 | 82.7718 | 84.6339 | 86.1440 |

Table 58: Fixed-b critical values for t-test in regression with intercept and linear trend and 2 regressors for the Parzen kernel (Upper tail).

|       |         |         |         |          |          |          |          |          |          |          |
|-------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|       | 0.02    | 0.04    | 0.06    | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
| 95%   | 1.8163  | 2.1208  | 2.5155  | 3.0100   | 3.6339   | 4.4150   | 5.3572   | 6.5029   | 7.8520   | 9.3456   |
| 97.5% | 2.1681  | 2.5474  | 3.0330  | 3.6590   | 4.4651   | 5.4666   | 6.7256   | 8.2204   | 9.9697   | 11.8731  |
| 99%   | 2.5760  | 3.0477  | 3.6679  | 4.4545   | 5.5208   | 6.8744   | 8.5088   | 10.5464  | 12.8164  | 15.4054  |
| 99.5% | 2.8513  | 3.4092  | 4.1377  | 5.1102   | 6.3241   | 7.8318   | 9.8160   | 12.1367  | 14.8885  | 17.9535  |
|       | 0.22    | 0.24    | 0.26    | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 10.9031 | 12.5021 | 14.0340 | 15.5294  | 16.8500  | 18.0119  | 19.0293  | 19.8908  | 20.6561  | 21.3926  |
| 97.5% | 13.9620 | 16.0359 | 18.0881 | 19.9829  | 21.7912  | 23.4154  | 24.8127  | 26.0646  | 27.3298  | 28.4767  |
| 99%   | 18.1213 | 21.0220 | 23.7403 | 26.2693  | 28.5861  | 30.6465  | 32.6227  | 34.4245  | 36.2973  | 38.1993  |
| 99.5% | 21.1626 | 24.5709 | 27.7231 | 30.8733  | 33.8437  | 36.4237  | 38.9809  | 41.2374  | 43.0674  | 45.0914  |
|       | 0.42    | 0.44    | 0.46    | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 22.1217 | 22.8313 | 23.5139 | 24.2214  | 24.9497  | 25.6743  | 26.3990  | 27.0864  | 27.8016  | 28.5218  |
| 97.5% | 29.5594 | 30.5726 | 31.6988 | 32.8493  | 34.0369  | 35.2271  | 36.2943  | 37.5050  | 38.6821  | 39.9865  |
| 99%   | 40.0451 | 41.4329 | 42.9991 | 44.7261  | 46.3122  | 48.0259  | 49.9756  | 51.9917  | 53.9090  | 55.6840  |
| 99.5% | 47.5020 | 49.5036 | 51.7701 | 54.0821  | 56.1963  | 58.6043  | 60.9384  | 63.7195  | 66.6233  | 68.6227  |
|       | 0.62    | 0.64    | 0.66    | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 29.0976 | 29.8432 | 30.4027 | 30.9954  | 31.5155  | 32.0725  | 32.5783  | 33.0229  | 33.5814  | 34.1788  |
| 97.5% | 41.2577 | 42.3860 | 43.4256 | 44.3786  | 45.4094  | 46.5147  | 47.5497  | 48.5478  | 49.6267  | 50.6220  |
| 99%   | 57.5272 | 59.5533 | 61.4519 | 63.7656  | 65.6999  | 67.5523  | 69.4491  | 71.0482  | 72.7525  | 74.6291  |
| 99.5% | 70.5826 | 73.4025 | 76.6336 | 79.3207  | 81.2912  | 83.5609  | 85.5550  | 87.3047  | 89.5898  | 91.8422  |
|       | 0.82    | 0.84    | 0.86    | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 34.7177 | 35.1033 | 35.5817 | 36.0970  | 36.5494  | 37.0096  | 37.3851  | 37.7333  | 38.0920  | 38.4090  |
| 97.5% | 51.7105 | 52.8141 | 53.6737 | 54.4811  | 55.5430  | 56.2980  | 56.9800  | 57.7764  | 58.4338  | 59.3065  |
| 99%   | 76.1689 | 77.5165 | 78.8180 | 80.5968  | 82.2635  | 83.8303  | 85.4555  | 87.2607  | 88.8658  | 90.0936  |
| 99.5% | 93.9479 | 96.0167 | 98.9679 | 101.1766 | 103.5233 | 106.0825 | 108.6803 | 110.8132 | 113.3580 | 115.1319 |

Table 59: Fixed-b critical values for t-test in regression with intercept and linear trend and 3 regressors for the Parzen kernel (Upper tail).

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 95%   | 1.8658   | 2.2721   | 2.8203   | 3.5593   | 4.5135   | 5.7670   | 7.3183   | 9.1380   | 11.1440  | 13.2147  |
| 97.5% | 2.2401   | 2.7444   | 3.4183   | 4.3422   | 5.5761   | 7.1578   | 9.1576   | 11.5231  | 14.0827  | 16.7406  |
| 99%   | 2.6528   | 3.2827   | 4.1393   | 5.3072   | 6.9351   | 9.0521   | 11.6039  | 14.5918  | 17.9057  | 21.3950  |
| 99.5% | 2.9439   | 3.6481   | 4.6632   | 6.0654   | 7.9510   | 10.3960  | 13.4470  | 16.9419  | 20.7900  | 24.8919  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 15.2323  | 17.0041  | 18.5432  | 19.8936  | 21.0181  | 22.0936  | 23.0995  | 24.0808  | 25.0439  | 25.9241  |
| 97.5% | 19.2480  | 21.6406  | 23.6847  | 25.5652  | 27.1459  | 28.6297  | 30.1182  | 31.4674  | 33.0192  | 34.3325  |
| 99%   | 24.6922  | 27.8203  | 30.7306  | 33.1964  | 35.4211  | 37.7106  | 39.7044  | 42.0197  | 44.0167  | 46.4073  |
| 99.5% | 28.9613  | 32.5536  | 35.9234  | 38.5748  | 41.4422  | 44.5744  | 47.4376  | 50.0475  | 52.7270  | 54.8926  |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 26.8230  | 27.7146  | 28.6520  | 29.5696  | 30.3869  | 31.2993  | 32.2734  | 33.1575  | 33.9373  | 34.6811  |
| 97.5% | 35.7942  | 37.3859  | 38.9659  | 40.4133  | 41.9624  | 43.7003  | 45.2806  | 46.5412  | 47.9905  | 49.5305  |
| 99%   | 48.6298  | 50.9049  | 53.4258  | 55.9123  | 58.2963  | 60.6910  | 62.9433  | 65.1497  | 67.5606  | 69.7322  |
| 99.5% | 58.0888  | 60.8826  | 64.4398  | 67.7728  | 70.5524  | 73.5171  | 76.7775  | 79.9066  | 83.3848  | 85.9827  |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 35.4538  | 36.1290  | 36.7399  | 37.4820  | 38.1849  | 38.7151  | 39.2599  | 39.6891  | 40.1903  | 40.6797  |
| 97.5% | 50.7442  | 52.2411  | 53.6844  | 55.0307  | 56.1375  | 57.1540  | 58.5328  | 59.6823  | 60.8593  | 61.9057  |
| 99%   | 71.9319  | 74.1784  | 76.5060  | 78.6292  | 81.0238  | 83.2394  | 85.5320  | 87.7186  | 89.9568  | 92.0350  |
| 99.5% | 88.6439  | 92.0330  | 95.5209  | 98.7694  | 101.8478 | 104.5536 | 106.5769 | 109.3097 | 112.8910 | 116.1690 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 41.1356  | 41.6128  | 42.1659  | 42.5107  | 43.0151  | 43.4358  | 43.7898  | 44.2743  | 44.5792  | 44.8778  |
| 97.5% | 63.0193  | 64.1078  | 65.1799  | 66.1353  | 66.8692  | 67.7855  | 68.7583  | 69.6685  | 70.6208  | 71.5341  |
| 99%   | 93.7557  | 95.8075  | 97.9497  | 99.3872  | 101.1870 | 102.6930 | 104.9538 | 106.9039 | 108.5442 | 110.4211 |
| 99.5% | 119.2272 | 121.7223 | 124.4901 | 127.6342 | 130.6518 | 132.5639 | 135.0380 | 137.8512 | 139.7767 | 143.4825 |

Table 60: Fixed-b critical values for t-test in regression with intercept and linear trend and 4 regressors for the Parzen kernel (Upper tail).

## 5.2 Wald Test

|       | 0.02      | 0.04      | 0.06      | 0.08      | 0.10      | 0.12      | 0.14      | 0.16      | 0.18      | 0.20      |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 90%   | 2.9347    | 3.4059    | 4.0163    | 4.7798    | 5.7258    | 6.9149    | 8.4488    | 10.3665   | 12.8238   | 15.8621   |
| 95%   | 4.1987    | 4.9005    | 5.8350    | 6.9980    | 8.4894    | 10.4145   | 12.8431   | 15.9414   | 19.8530   | 25.0513   |
| 97.5% | 5.5278    | 6.5125    | 7.7913    | 9.4528    | 11.5545   | 14.3271   | 17.9578   | 22.4578   | 28.3854   | 35.9923   |
| 99%   | 7.3265    | 8.8297    | 10.7099   | 13.1153   | 16.1082   | 20.2306   | 25.8210   | 33.1624   | 42.9749   | 54.8843   |
|       | 0.22      | 0.24      | 0.26      | 0.28      | 0.30      | 0.32      | 0.34      | 0.36      | 0.38      | 0.40      |
| 90%   | 19.7514   | 24.5393   | 30.3579   | 37.3654   | 45.7944   | 55.6577   | 67.1070   | 79.9069   | 94.0604   | 109.4909  |
| 95%   | 31.4810   | 39.6888   | 49.5426   | 61.7529   | 76.4446   | 93.5393   | 113.5063  | 136.0180  | 161.5454  | 188.1329  |
| 97.5% | 45.5670   | 57.8164   | 73.0245   | 91.7952   | 114.6053  | 141.2827  | 173.9105  | 209.9321  | 248.4782  | 293.7256  |
| 99%   | 70.7098   | 90.5997   | 115.5501  | 146.0896  | 183.8355  | 227.0519  | 276.2299  | 334.6437  | 397.8501  | 468.0219  |
|       | 0.42      | 0.44      | 0.46      | 0.48      | 0.50      | 0.52      | 0.54      | 0.56      | 0.58      | 0.60      |
| 90%   | 125.3809  | 142.4536  | 159.5066  | 177.3885  | 193.9005  | 210.5724  | 227.8726  | 242.6161  | 257.8641  | 270.9783  |
| 95%   | 216.5411  | 247.5325  | 277.3663  | 308.8291  | 341.8179  | 371.9127  | 402.0590  | 433.0776  | 463.2641  | 488.7106  |
| 97.5% | 339.7493  | 390.0190  | 440.2180  | 487.6139  | 539.1152  | 590.7159  | 644.7207  | 693.2182  | 744.8451  | 791.5934  |
| 99%   | 540.7365  | 624.6584  | 703.2736  | 790.8946  | 880.0765  | 971.5513  | 1061.5935 | 1155.9353 | 1239.7461 | 1315.7067 |
|       | 0.62      | 0.64      | 0.66      | 0.68      | 0.70      | 0.72      | 0.74      | 0.76      | 0.78      | 0.80      |
| 90%   | 283.2151  | 294.0350  | 306.6362  | 317.9685  | 328.9951  | 339.2164  | 349.0627  | 359.7535  | 369.5382  | 381.0891  |
| 95%   | 512.5734  | 540.1897  | 567.8026  | 592.5518  | 618.4132  | 643.8801  | 667.3009  | 690.9535  | 713.8438  | 741.8684  |
| 97.5% | 839.1910  | 880.7437  | 920.0457  | 961.1938  | 1007.0537 | 1050.2772 | 1096.4456 | 1145.1443 | 1187.8512 | 1239.2818 |
| 99%   | 1398.4575 | 1491.1502 | 1565.4364 | 1655.9271 | 1726.2386 | 1799.5033 | 1876.7411 | 1935.3837 | 2041.7895 | 2142.7327 |
|       | 0.82      | 0.84      | 0.86      | 0.88      | 0.90      | 0.92      | 0.94      | 0.96      | 0.98      | 1.00      |
| 90%   | 391.1782  | 401.3079  | 411.2450  | 422.3636  | 433.9306  | 445.4269  | 456.7853  | 468.3218  | 480.1512  | 493.1074  |
| 95%   | 766.9827  | 793.4956  | 817.1491  | 846.9045  | 868.7859  | 899.1232  | 928.5805  | 958.3049  | 991.0616  | 1019.5452 |
| 97.5% | 1298.7799 | 1349.2193 | 1401.2216 | 1463.1492 | 1518.4257 | 1579.0186 | 1643.2200 | 1693.4309 | 1766.3691 | 1829.4246 |
| 99%   | 2247.5099 | 2358.8190 | 2466.1010 | 2577.4496 | 2701.7788 | 2844.8237 | 2959.5710 | 3106.4275 | 3246.0289 | 3384.3063 |

Table 61: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 1 regressors for the Parzen kernel.



|       | 0.02      | 0.04      | 0.06      | 0.08      | 0.10      | 0.12      | 0.14      | 0.16      | 0.18      | 0.20      |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 90%   | 3.0887    | 3.8976    | 4.9923    | 6.5206    | 8.6637    | 11.5505   | 15.5809   | 21.1106   | 28.7000   | 38.6239   |
| 95%   | 4.4155    | 5.5843    | 7.2761    | 9.6080    | 12.8503   | 17.4258   | 23.8521   | 32.8856   | 45.3407   | 61.9519   |
| 97.5% | 5.7972    | 7.4283    | 9.7612    | 13.0011   | 17.5418   | 24.0705   | 33.5463   | 47.0051   | 65.3743   | 89.9072   |
| 99%   | 7.7076    | 9.9928    | 13.2316   | 17.8499   | 24.5299   | 34.7004   | 48.6570   | 69.2850   | 98.2734   | 137.4195  |
|       | 0.22      | 0.24      | 0.26      | 0.28      | 0.30      | 0.32      | 0.34      | 0.36      | 0.38      | 0.40      |
| 90%   | 51.8485   | 68.1484   | 87.8523   | 111.1485  | 137.1026  | 164.8206  | 194.6359  | 224.8496  | 253.3868  | 281.9161  |
| 95%   | 83.6299   | 111.4765  | 144.5942  | 183.4810  | 229.4226  | 278.7496  | 330.1382  | 381.9656  | 433.4158  | 484.4196  |
| 97.5% | 122.8146  | 165.4057  | 217.8638  | 279.1205  | 349.5520  | 423.6960  | 505.1465  | 583.7347  | 664.0770  | 746.9983  |
| 99%   | 190.2077  | 258.2178  | 341.0170  | 439.3563  | 543.5247  | 665.2237  | 782.7513  | 910.8788  | 1041.0294 | 1173.3244 |
|       | 0.42      | 0.44      | 0.46      | 0.48      | 0.50      | 0.52      | 0.54      | 0.56      | 0.58      | 0.60      |
| 90%   | 307.7519  | 331.9002  | 353.3178  | 374.8248  | 394.9246  | 415.0680  | 435.2007  | 455.9212  | 477.2928  | 496.9169  |
| 95%   | 534.9966  | 579.3494  | 623.7803  | 662.1407  | 706.1285  | 748.3647  | 790.0804  | 831.7992  | 875.9650  | 924.6098  |
| 97.5% | 826.5040  | 906.9417  | 982.5012  | 1055.0326 | 1124.2553 | 1189.0944 | 1267.2913 | 1347.3558 | 1429.5938 | 1518.4963 |
| 99%   | 1307.6188 | 1440.7047 | 1578.0323 | 1727.8449 | 1853.7331 | 1977.7069 | 2119.2794 | 2280.2236 | 2420.1120 | 2592.5549 |
|       | 0.62      | 0.64      | 0.66      | 0.68      | 0.70      | 0.72      | 0.74      | 0.76      | 0.78      | 0.80      |
| 90%   | 517.6883  | 537.4787  | 559.2064  | 580.7544  | 604.2166  | 628.0571  | 652.9802  | 677.2812  | 700.5711  | 724.5187  |
| 95%   | 977.3025  | 1034.7383 | 1090.5886 | 1148.7643 | 1198.2235 | 1254.1731 | 1312.6204 | 1368.8697 | 1436.9720 | 1500.4697 |
| 97.5% | 1612.2876 | 1703.8470 | 1804.7872 | 1919.4730 | 2029.9239 | 2149.0176 | 2275.8772 | 2403.5384 | 2520.7197 | 2648.1748 |
| 99%   | 2742.4260 | 2929.0055 | 3114.2133 | 3319.3086 | 3548.2270 | 3776.2055 | 4010.5407 | 4276.4290 | 4504.7965 | 4768.8429 |
|       | 0.82      | 0.84      | 0.86      | 0.88      | 0.90      | 0.92      | 0.94      | 0.96      | 0.98      | 1.00      |
| 90%   | 747.6679  | 771.6535  | 793.2604  | 814.2351  | 835.6467  | 859.8938  | 880.5339  | 900.3323  | 923.2488  | 946.7513  |
| 95%   | 1557.8273 | 1628.3163 | 1694.0252 | 1759.6599 | 1816.9234 | 1886.0978 | 1955.3072 | 2013.8705 | 2083.4066 | 2144.8204 |
| 97.5% | 2781.7483 | 2917.2471 | 3036.9857 | 3171.5942 | 3301.3797 | 3456.0401 | 3608.6948 | 3707.9459 | 3822.0349 | 3956.6567 |
| 99%   | 5072.4563 | 5321.7567 | 5571.7481 | 5805.2817 | 6095.1954 | 6416.9758 | 6659.3511 | 6904.3052 | 7149.4328 | 7454.6737 |

Table 62: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 2 regressors for the Parzen kernel.

|       | 0.02      | 0.04      | 0.06      | 0.08      | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| 90%   | 5.2566    | 6.6753    | 8.6382    | 11.4062   | 15.1817    | 20.5651    | 28.0577    | 38.3668    | 52.5607    | 71.2698    |
| 95%   | 6.9381    | 8.8646    | 11.6796   | 15.6090   | 21.0818    | 28.9058    | 39.8559    | 55.1023    | 76.3424    | 105.4461   |
| 97.5% | 8.6565    | 11.2167   | 14.8326   | 19.9809   | 27.4461    | 38.1726    | 53.6181    | 75.6143    | 106.4596   | 147.5953   |
| 99%   | 10.9199   | 14.1490   | 19.1413   | 26.2083   | 37.1091    | 52.7525    | 75.5332    | 107.4726   | 153.2746   | 215.2231   |
|       | 0.22      | 0.24      | 0.26      | 0.28      | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 95.9175   | 127.3666  | 165.5281  | 209.8168  | 259.5337   | 315.2967   | 372.2067   | 430.1791   | 489.2252   | 543.5365   |
| 95%   | 143.5667  | 192.0003  | 252.1716  | 322.1232  | 401.0349   | 487.3493   | 580.1496   | 675.0603   | 773.6889   | 861.8332   |
| 97.5% | 202.1832  | 272.6763  | 358.3701  | 457.7599  | 569.5806   | 697.1374   | 829.5816   | 969.3575   | 1105.6150  | 1246.2506  |
| 99%   | 298.0653  | 403.0927  | 531.1094  | 683.9706  | 854.2391   | 1042.4430  | 1242.0065  | 1436.1933  | 1655.0237  | 1876.9152  |
|       | 0.42      | 0.44      | 0.46      | 0.48      | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 600.4314  | 650.7018  | 699.9417  | 744.7826  | 787.3367   | 830.1799   | 870.6902   | 916.1400   | 960.2419   | 1008.8472  |
| 95%   | 951.9136  | 1039.4305 | 1123.2853 | 1208.9095 | 1286.5878  | 1363.5373  | 1446.0380  | 1528.9906  | 1621.5434  | 1723.1505  |
| 97.5% | 1393.8836 | 1532.2896 | 1664.8894 | 1799.1103 | 1928.9628  | 2054.3957  | 2191.2170  | 2331.5806  | 2487.2143  | 2648.2514  |
| 99%   | 2096.6636 | 2298.7741 | 2505.1506 | 2739.0283 | 2947.6231  | 3208.1412  | 3453.1907  | 3726.1311  | 4019.0147  | 4295.8011  |
|       | 0.62      | 0.64      | 0.66      | 0.68      | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 1058.8690 | 1110.8807 | 1161.4298 | 1216.4778 | 1271.4955  | 1327.8977  | 1385.4707  | 1447.3105  | 1504.2250  | 1564.1289  |
| 95%   | 1821.9117 | 1921.5390 | 2039.4822 | 2158.1254 | 2264.7465  | 2383.6025  | 2509.2777  | 2644.5191  | 2776.0112  | 2911.7961  |
| 97.5% | 2805.6680 | 2983.9197 | 3182.4022 | 3382.4422 | 3603.3618  | 3809.1082  | 4055.4454  | 4275.2605  | 4506.0205  | 4748.3544  |
| 99%   | 4612.2374 | 4870.9147 | 5214.7107 | 5520.2254 | 5916.5198  | 6272.7997  | 6721.5962  | 7163.9991  | 7544.8391  | 8054.5956  |
|       | 0.82      | 0.84      | 0.86      | 0.88      | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 1621.2681 | 1680.5922 | 1734.4186 | 1795.3655 | 1848.6387  | 1903.3766  | 1954.2573  | 2008.5118  | 2060.4266  | 2115.0395  |
| 95%   | 3067.4453 | 3209.3568 | 3344.5051 | 3470.5012 | 3607.9898  | 3745.1685  | 3882.2240  | 4013.7646  | 4142.7261  | 4287.9092  |
| 97.5% | 4986.9036 | 5255.4937 | 5472.7480 | 5717.4997 | 5994.9489  | 6297.2977  | 6597.5328  | 6893.5145  | 7171.1858  | 7413.0804  |
| 99%   | 8562.2169 | 9073.3013 | 9495.2632 | 9988.7724 | 10536.8703 | 10971.7640 | 11492.2373 | 11996.6142 | 12510.2622 | 13001.3429 |

Table 63: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and linear trend and 2 regressors for the Parzen kernel.

|       |           |           |           |            |            |            |            |            |            |            |
|-------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|
|       | 0.02      | 0.04      | 0.06      | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
| 90%   | 3.2877    | 4.4909    | 6.3142    | 9.0466     | 13.2009    | 19.4939    | 29.1433    | 43.0441    | 62.5085    | 88.2353    |
| 95%   | 4.7046    | 6.4933    | 9.2381    | 13.4138    | 19.9005    | 29.8634    | 44.9834    | 67.4789    | 99.3335    | 142.2613   |
| 97.5% | 6.2245    | 8.6568    | 12.3828   | 18.3395    | 27.4435    | 42.0349    | 64.5279    | 97.8164    | 145.4108   | 209.2153   |
| 99%   | 8.2605    | 11.6909   | 17.0621   | 25.6792    | 39.5529    | 61.5249    | 95.7913    | 147.1153   | 218.7769   | 321.3111   |
|       | 0.22      | 0.24      | 0.26      | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 120.1991  | 158.6687  | 200.6749  | 244.0047   | 285.3630   | 325.6973   | 364.0700   | 400.1126   | 433.4745   | 465.0590   |
| 95%   | 194.7569  | 257.9939  | 326.4224  | 400.2140   | 473.9014   | 546.2575   | 616.5321   | 686.1840   | 750.7627   | 814.3272   |
| 97.5% | 289.5021  | 384.9448  | 489.3085  | 597.2462   | 715.8096   | 828.8043   | 947.9463   | 1050.4797  | 1158.0475  | 1276.6283  |
| 99%   | 444.6708  | 593.7114  | 762.0619  | 928.1238   | 1116.2745  | 1310.3605  | 1506.2375  | 1691.5667  | 1879.0004  | 2060.0572  |
|       | 0.42      | 0.44      | 0.46      | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 497.4016  | 528.2561  | 561.0899  | 595.7310   | 631.8745   | 666.7682   | 703.4617   | 744.5000   | 786.5495   | 829.0230   |
| 95%   | 877.6209  | 942.9188  | 1008.2352 | 1082.8158  | 1161.7978  | 1235.4165  | 1324.1518  | 1415.4367  | 1505.7438  | 1609.5073  |
| 97.5% | 1385.7564 | 1502.0203 | 1623.8747 | 1733.8662  | 1868.8144  | 2011.1500  | 2154.6922  | 2326.8009  | 2501.2155  | 2695.0594  |
| 99%   | 2256.6640 | 2451.5011 | 2647.2940 | 2865.9422  | 3134.6918  | 3389.7960  | 3657.1760  | 3954.8609  | 4298.2815  | 4635.6054  |
|       | 0.62      | 0.64      | 0.66      | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 868.9426  | 906.1819  | 945.0758  | 981.5240   | 1017.0616  | 1053.0446  | 1086.4116  | 1117.1237  | 1149.5005  | 1190.1212  |
| 95%   | 1706.4803 | 1796.8910 | 1900.2269 | 2003.8443  | 2106.4221  | 2197.0753  | 2295.1360  | 2397.7095  | 2497.3409  | 2587.1926  |
| 97.5% | 2898.8480 | 3097.7795 | 3280.1287 | 3473.1164  | 3673.3567  | 3881.5226  | 4083.4608  | 4276.8825  | 4485.1881  | 4671.5523  |
| 99%   | 5029.0836 | 5375.3114 | 5797.0066 | 6166.6161  | 6495.4032  | 6840.0895  | 7211.1941  | 7691.2625  | 8112.7957  | 8523.0247  |
|       | 0.82      | 0.84      | 0.86      | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 1224.8254 | 1262.8845 | 1292.2590 | 1325.2775  | 1357.3132  | 1387.9373  | 1414.1672  | 1445.2084  | 1472.3485  | 1498.4462  |
| 95%   | 2689.2185 | 2790.9888 | 2883.4684 | 2991.2434  | 3077.6442  | 3175.5242  | 3274.8062  | 3378.5136  | 3487.4390  | 3587.3042  |
| 97.5% | 4879.7863 | 5081.7435 | 5295.1178 | 5527.3097  | 5708.5923  | 5928.5223  | 6150.9739  | 6376.4948  | 6584.8300  | 6839.4268  |
| 99%   | 8936.6037 | 9409.9141 | 9868.8301 | 10416.9684 | 10844.4928 | 11294.5570 | 11721.3923 | 12261.1737 | 12856.9923 | 13426.7482 |

Table 64: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 3 regressors for the Parzen kernel.

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 5.6154     | 7.7607     | 11.0188    | 15.9682    | 23.5168    | 35.2882    | 53.1992    | 79.3056    | 116.2847   | 165.3308   |
| 95%   | 7.3939     | 10.2907    | 14.8128    | 21.7602    | 32.8281    | 49.9152    | 76.6563    | 115.4783   | 170.4167   | 244.8836   |
| 97.5% | 9.2575     | 13.0013    | 18.8602    | 28.1054    | 42.9662    | 66.2974    | 102.8378   | 157.7547   | 237.1956   | 343.1780   |
| 99%   | 11.6637    | 16.6489    | 24.7867    | 37.5303    | 57.7735    | 91.5325    | 145.8786   | 229.1188   | 348.1508   | 503.2564   |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 227.0779   | 301.0464   | 383.7215   | 469.4987   | 553.2927   | 637.9039   | 717.5403   | 793.3484   | 866.8691   | 937.7438   |
| 95%   | 339.5280   | 452.0009   | 579.8450   | 712.4042   | 845.5283   | 984.8222   | 1112.3220  | 1241.1913  | 1370.1538  | 1502.6063  |
| 97.5% | 478.0038   | 636.6533   | 813.8770   | 1005.8752  | 1209.6480  | 1403.4779  | 1597.1918  | 1801.2608  | 1983.9224  | 2179.2612  |
| 99%   | 693.5913   | 915.6915   | 1167.8367  | 1446.3874  | 1733.5860  | 2028.8164  | 2327.3575  | 2627.4769  | 2921.2639  | 3214.1134  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 1009.8303  | 1080.8874  | 1151.6288  | 1225.3200  | 1308.1385  | 1394.5382  | 1483.9319  | 1575.8144  | 1672.5636  | 1767.4951  |
| 95%   | 1629.0349  | 1762.6608  | 1905.1381  | 2039.5298  | 2193.9137  | 2360.4014  | 2527.1091  | 2704.2244  | 2889.2469  | 3106.1611  |
| 97.5% | 2387.6470  | 2608.9145  | 2836.7667  | 3089.1771  | 3326.5196  | 3584.1485  | 3893.3211  | 4210.4310  | 4518.5675  | 4879.3916  |
| 99%   | 3581.8058  | 3931.8941  | 4296.8247  | 4734.3592  | 5114.5254  | 5574.9495  | 6149.4925  | 6658.9625  | 7123.6041  | 7697.4899  |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 1858.7607  | 1959.5103  | 2060.2112  | 2154.0947  | 2246.2471  | 2332.4984  | 2425.1276  | 2524.8577  | 2617.0549  | 2720.1034  |
| 95%   | 3312.3673  | 3523.2837  | 3748.9400  | 3980.6148  | 4190.4802  | 4405.2994  | 4627.2116  | 4849.4066  | 5066.8756  | 5287.6496  |
| 97.5% | 5230.4027  | 5595.6959  | 5977.1267  | 6378.2950  | 6793.1717  | 7173.5831  | 7552.7323  | 7952.1779  | 8358.2062  | 8763.9358  |
| 99%   | 8393.5839  | 9016.6718  | 9632.2261  | 10258.7829 | 10914.8943 | 11715.8687 | 12457.3443 | 13292.3294 | 13860.0463 | 14593.1130 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 2799.3225  | 2893.5233  | 2977.4159  | 3061.3959  | 3147.6774  | 3222.5444  | 3304.3491  | 3384.6398  | 3465.9049  | 3538.2130  |
| 95%   | 5501.8917  | 5732.6370  | 5958.0243  | 6197.3573  | 6454.4232  | 6685.1781  | 6911.4045  | 7151.7148  | 7350.0581  | 7572.1896  |
| 97.5% | 9153.3065  | 9570.5275  | 9942.3524  | 10386.9526 | 10903.8257 | 11332.7631 | 11861.0380 | 12375.7367 | 12795.7875 | 13256.5030 |
| 99%   | 15392.7077 | 16330.4889 | 17207.6388 | 18155.7302 | 19067.2387 | 19872.9146 | 20937.0289 | 22050.6506 | 22981.4545 | 24032.7568 |

Table 65: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and linear trend and 3 regressors for the Parzen kernel.

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 7.6759     | 10.6566    | 15.1771    | 22.1485    | 32.8419    | 49.4642    | 74.6906    | 111.8699   | 164.7475   | 236.5604   |
| 95%   | 9.7248     | 13.5830    | 19.5518    | 29.0305    | 44.2226    | 67.8718    | 104.1402   | 158.8262   | 235.4654   | 338.4331   |
| 97.5% | 11.7221    | 16.6221    | 24.3543    | 36.6575    | 56.1715    | 87.7542    | 137.6621   | 212.9804   | 320.4841   | 462.3372   |
| 99%   | 14.4227    | 20.6886    | 30.8809    | 47.1284    | 74.5641    | 119.0483   | 190.2891   | 297.3467   | 450.0671   | 657.0935   |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 327.2347   | 432.5100   | 553.0578   | 673.5856   | 803.0671   | 927.1199   | 1043.0317  | 1159.4096  | 1268.3899  | 1375.8637  |
| 95%   | 470.4467   | 627.8307   | 806.2836   | 993.4055   | 1183.4617  | 1380.5131  | 1565.1010  | 1751.0268  | 1930.5224  | 2112.3571  |
| 97.5% | 644.1642   | 859.1652   | 1099.3462  | 1356.8728  | 1613.9817  | 1896.1642  | 2168.1217  | 2441.0204  | 2701.2986  | 2993.9991  |
| 99%   | 914.2184   | 1220.0356  | 1567.5199  | 1925.9461  | 2279.1957  | 2672.2012  | 3060.4506  | 3519.3138  | 3915.9320  | 4318.7304  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 1481.1824  | 1589.5863  | 1702.4541  | 1819.0637  | 1943.4018  | 2074.4349  | 2208.8789  | 2362.4183  | 2515.7956  | 2678.6636  |
| 95%   | 2305.3359  | 2486.6979  | 2685.8808  | 2902.0037  | 3131.3365  | 3366.5560  | 3639.8416  | 3930.5513  | 4235.3773  | 4551.4749  |
| 97.5% | 3283.1186  | 3565.3032  | 3877.1639  | 4209.1734  | 4598.2720  | 5007.6910  | 5419.7251  | 5832.6341  | 6356.5311  | 6821.9099  |
| 99%   | 4797.7415  | 5306.2619  | 5771.1123  | 6330.1683  | 6922.9159  | 7623.3279  | 8281.6694  | 9036.1243  | 9803.8991  | 10588.7430 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 2833.8126  | 2994.0481  | 3149.0627  | 3314.3904  | 3461.4543  | 3618.7371  | 3768.9683  | 3912.0728  | 4074.2727  | 4220.2858  |
| 95%   | 4891.2542  | 5195.5363  | 5518.4962  | 5844.8913  | 6159.9506  | 6498.4227  | 6824.1338  | 7138.0188  | 7506.9099  | 7855.3152  |
| 97.5% | 7331.1858  | 7892.4618  | 8409.8386  | 8954.7538  | 9493.9087  | 10120.2789 | 10690.2252 | 11333.0271 | 11933.3881 | 12557.2685 |
| 99%   | 11396.5533 | 12253.3642 | 13102.1481 | 14058.2416 | 14949.8306 | 16034.5846 | 17102.5497 | 18190.5015 | 19298.3391 | 20370.5398 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 4373.9233  | 4543.9566  | 4695.2356  | 4822.2198  | 4974.0352  | 5115.4069  | 5245.4660  | 5387.1614  | 5520.8806  | 5633.9481  |
| 95%   | 8221.9679  | 8594.7555  | 8955.1581  | 9268.0613  | 9607.8912  | 9966.6099  | 10329.1236 | 10700.2992 | 11117.5728 | 11511.1203 |
| 97.5% | 13205.6334 | 13823.1768 | 14368.1961 | 15067.3830 | 15758.3887 | 16473.2409 | 17250.1746 | 17943.6698 | 18657.4518 | 19519.8706 |
| 99%   | 21378.6143 | 22758.8460 | 23889.4231 | 25316.8422 | 26558.5667 | 27689.4705 | 28855.2679 | 30086.4740 | 31452.0646 | 32981.3480 |

Table 66: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and linear trend and 3 regressors for the Parzen kernel.

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 3.4793     | 5.1991     | 8.0017     | 12.7296    | 20.6295    | 33.6181    | 53.9555    | 83.7589    | 124.4082   | 173.8038   |
| 95%   | 4.9933     | 7.5276     | 11.7532    | 18.8731    | 30.8548    | 51.2517    | 83.8330    | 130.6638   | 195.7825   | 277.0942   |
| 97.5% | 6.5969     | 9.9749     | 15.7301    | 25.8336    | 43.0046    | 72.2024    | 118.9655   | 189.7926   | 285.6607   | 403.8665   |
| 99%   | 8.8395     | 13.6455    | 21.7705    | 36.5479    | 62.2205    | 105.7562   | 176.1227   | 282.7941   | 430.7574   | 610.9994   |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 228.9693   | 285.1526   | 341.3899   | 392.3713   | 438.8054   | 485.1733   | 526.9771   | 570.2052   | 615.1098   | 661.2040   |
| 95%   | 367.4884   | 462.8123   | 557.0313   | 646.7656   | 733.3039   | 818.4232   | 907.9226   | 994.1806   | 1086.3167  | 1185.5894  |
| 97.5% | 538.7185   | 683.3009   | 837.1646   | 983.7002   | 1120.5278  | 1266.4049  | 1412.5419  | 1572.0228  | 1733.0761  | 1905.7993  |
| 99%   | 818.4949   | 1055.1781  | 1284.0606  | 1540.4752  | 1767.4673  | 2008.7100  | 2250.2773  | 2507.2906  | 2784.7069  | 3103.9026  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 710.1025   | 761.8512   | 815.3098   | 867.2052   | 923.6461   | 979.9326   | 1035.6580  | 1087.2976  | 1140.7405  | 1194.4808  |
| 95%   | 1291.2681  | 1408.1266  | 1521.7647  | 1641.7260  | 1769.0485  | 1908.8792  | 2025.3112  | 2158.8379  | 2299.4713  | 2452.7187  |
| 97.5% | 2098.1474  | 2293.1099  | 2477.9194  | 2697.1244  | 2942.0672  | 3190.0901  | 3440.1077  | 3732.0768  | 3992.3064  | 4246.0719  |
| 99%   | 3419.3295  | 3800.2950  | 4182.5431  | 4591.8031  | 5070.9951  | 5528.3795  | 5976.0415  | 6528.9922  | 7115.0973  | 7744.6533  |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 1248.2668  | 1295.0968  | 1344.3417  | 1393.4220  | 1439.9218  | 1485.6296  | 1531.1032  | 1576.6836  | 1619.3895  | 1662.1225  |
| 95%   | 2596.2238  | 2722.8585  | 2854.8499  | 2995.4829  | 3125.9341  | 3256.8625  | 3390.0625  | 3521.7547  | 3645.2191  | 3785.1846  |
| 97.5% | 4532.8634  | 4833.7699  | 5114.8593  | 5429.8793  | 5694.1894  | 5988.6279  | 6257.9769  | 6536.8593  | 6814.2864  | 7134.3497  |
| 99%   | 8237.2227  | 8676.6597  | 9304.3974  | 10005.5980 | 10565.7531 | 11123.0236 | 11748.9297 | 12392.7117 | 12975.2410 | 13691.3409 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 1702.0918  | 1743.8287  | 1784.5821  | 1818.6807  | 1851.9188  | 1885.5489  | 1917.6180  | 1950.5825  | 1984.8477  | 2017.7458  |
| 95%   | 3937.9481  | 4067.9405  | 4219.4076  | 4349.5128  | 4459.4982  | 4557.6107  | 4700.4486  | 4815.1322  | 4959.7268  | 5100.3920  |
| 97.5% | 7526.1029  | 7774.4275  | 8115.8038  | 8480.0338  | 8795.2385  | 9119.8886  | 9458.0793  | 9802.1953  | 10060.9975 | 10331.2428 |
| 99%   | 14439.1302 | 15035.4907 | 15751.3545 | 16537.4962 | 17377.4169 | 18355.6557 | 19401.7055 | 19933.2721 | 20694.7044 | 21541.3225 |

Table 67: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 4 regressors for the Parzen kernel.

|       |            |            |            |            |            |            |            |            |            |            |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
| 90%   | 6.0028     | 9.0187     | 13.9932    | 22.4358    | 36.7462    | 60.5869    | 98.4201    | 154.7411   | 231.5506   | 326.9771   |
| 95%   | 7.9162     | 12.0364    | 19.0613    | 31.0319    | 51.7030    | 86.5857    | 143.1601   | 227.1792   | 342.1442   | 483.4685   |
| 97.5% | 9.9072     | 15.2206    | 24.4482    | 40.5669    | 68.3353    | 115.9909   | 192.4367   | 310.1595   | 471.5552   | 671.1249   |
| 99%   | 12.4112    | 19.5583    | 31.8427    | 53.9202    | 92.7964    | 160.4458   | 271.8633   | 442.2599   | 680.6144   | 962.8423   |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 433.9672   | 547.6074   | 656.1010   | 763.2005   | 865.2316   | 962.3020   | 1057.3509  | 1157.7154  | 1262.0234  | 1363.8912  |
| 95%   | 647.3360   | 824.6542   | 999.4056   | 1161.5096  | 1328.5110  | 1496.7496  | 1663.9475  | 1832.7727  | 2014.7113  | 2208.8093  |
| 97.5% | 897.9229   | 1142.2582  | 1382.7470  | 1634.4516  | 1879.2531  | 2125.7152  | 2365.7126  | 2652.8773  | 2942.0499  | 3267.2515  |
| 99%   | 1293.7447  | 1630.3119  | 1972.6239  | 2359.7175  | 2750.4351  | 3117.4236  | 3522.2980  | 3909.2150  | 4400.5333  | 4915.1835  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 1473.2813  | 1587.8609  | 1712.5370  | 1835.6376  | 1974.5473  | 2108.0181  | 2239.4031  | 2371.4819  | 2507.2957  | 2642.3938  |
| 95%   | 2421.3286  | 2663.8154  | 2913.1341  | 3149.1714  | 3424.6155  | 3711.2108  | 4005.4628  | 4297.8343  | 4593.6522  | 4891.7063  |
| 97.5% | 3645.2318  | 4001.8624  | 4371.4034  | 4794.5316  | 5238.0350  | 5695.7797  | 6200.9220  | 6730.1193  | 7274.0000  | 7822.9980  |
| 99%   | 5472.0028  | 6054.9404  | 6698.7993  | 7402.6660  | 8126.8117  | 8909.6835  | 9738.8231  | 10562.9877 | 11440.4750 | 12325.1313 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 2778.1954  | 2918.4238  | 3042.2022  | 3164.5065  | 3278.6626  | 3396.4940  | 3520.1717  | 3632.7893  | 3747.8796  | 3871.5163  |
| 95%   | 5182.8735  | 5483.3568  | 5814.5246  | 6126.2948  | 6436.4423  | 6763.4396  | 7070.4589  | 7366.1253  | 7709.6783  | 8052.9703  |
| 97.5% | 8360.0410  | 8903.8506  | 9444.1857  | 9958.2764  | 10576.6188 | 11151.2382 | 11715.7634 | 12439.1000 | 12950.4986 | 13621.4878 |
| 99%   | 13317.5792 | 14270.0878 | 15245.8251 | 16168.1217 | 17426.7172 | 18554.6527 | 19512.6332 | 20641.3683 | 21838.2595 | 23017.7632 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 3978.0066  | 4103.4219  | 4209.4992  | 4304.4929  | 4418.0808  | 4519.6191  | 4623.1690  | 4711.1220  | 4806.6668  | 4898.0606  |
| 95%   | 8319.6634  | 8648.5747  | 8944.4968  | 9280.8685  | 9598.6898  | 9908.6174  | 10218.5596 | 10576.4187 | 10899.5888 | 11225.8248 |
| 97.5% | 14279.5522 | 15024.8242 | 15732.4829 | 16370.4746 | 17121.6713 | 17757.0530 | 18375.9545 | 19175.4563 | 19956.8362 | 20482.1274 |
| 99%   | 24527.9661 | 25883.6767 | 27090.6618 | 28212.0929 | 29636.2789 | 31221.5631 | 32467.3738 | 34179.0019 | 35560.1905 | 37002.0293 |

Table 68: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and linear trend and 4 regressors for the Parzen kernel.

|       |            |            |            |            |            |            |            |            |            |            |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
| 90%   | 8.1108     | 12.2478    | 19.2013    | 30.8921    | 51.0734    | 84.8381    | 138.6401   | 219.0990   | 328.3384   | 464.5553   |
| 95%   | 10.3100    | 15.7348    | 25.0355    | 41.2562    | 69.1834    | 115.9479   | 193.1767   | 308.3427   | 467.6896   | 668.2273   |
| 97.5% | 12.4594    | 19.2871    | 31.1614    | 52.2302    | 89.6969    | 152.9749   | 256.2574   | 413.8871   | 629.8957   | 899.4634   |
| 99%   | 15.4623    | 24.2745    | 39.8651    | 68.1251    | 119.0003   | 207.0249   | 356.7345   | 581.6853   | 877.8753   | 1248.0554  |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 621.1640   | 783.4527   | 947.6479   | 1099.8181  | 1249.2737  | 1388.6061  | 1535.4958  | 1685.3264  | 1834.1936  | 1993.5345  |
| 95%   | 893.6708   | 1131.4361  | 1377.1668  | 1612.1145  | 1846.6847  | 2083.1739  | 2336.8081  | 2581.5835  | 2852.1960  | 3133.7044  |
| 97.5% | 1199.2048  | 1544.1200  | 1874.3501  | 2217.2282  | 2547.3406  | 2868.6005  | 3224.2936  | 3601.2322  | 3998.4098  | 4445.1492  |
| 99%   | 1684.5672  | 2145.1712  | 2599.0473  | 3069.3141  | 3585.2609  | 4112.0386  | 4680.1767  | 5270.1800  | 5951.7709  | 6609.2229  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 2167.6174  | 2357.0681  | 2547.1646  | 2761.3398  | 2971.5868  | 3197.4165  | 3409.9108  | 3638.7608  | 3865.1075  | 4088.9938  |
| 95%   | 3459.8272  | 3793.7594  | 4142.9477  | 4544.1593  | 4935.0036  | 5355.7049  | 5796.9042  | 6235.1807  | 6685.0421  | 7158.9126  |
| 97.5% | 4966.3571  | 5491.5377  | 6105.3856  | 6734.3892  | 7361.9805  | 8023.7943  | 8691.2904  | 9342.3182  | 10082.3602 | 10852.4980 |
| 99%   | 7365.1625  | 8256.5063  | 9093.8684  | 10009.0203 | 11091.8795 | 12022.0472 | 13090.0832 | 14246.9138 | 15487.8426 | 16699.1968 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 4309.0815  | 4518.0086  | 4743.3981  | 4953.4881  | 5152.3558  | 5369.5347  | 5569.6975  | 5779.5980  | 5969.7424  | 6184.5976  |
| 95%   | 7615.0324  | 8079.6690  | 8554.8894  | 9080.6545  | 9539.4441  | 9994.4059  | 10488.6527 | 11013.4618 | 11586.9177 | 12111.1520 |
| 97.5% | 11632.7744 | 12501.8970 | 13317.0144 | 14121.3987 | 15069.3143 | 15911.1666 | 16789.5543 | 17693.5781 | 18552.8568 | 19484.5794 |
| 99%   | 18023.5381 | 19414.6984 | 20905.5501 | 22228.7800 | 23923.2704 | 25445.7090 | 26995.8709 | 28454.4465 | 30089.0594 | 31626.5890 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 6356.0691  | 6532.1549  | 6715.3217  | 6892.5292  | 7057.2577  | 7251.6694  | 7445.5304  | 7594.4302  | 7752.2863  | 7925.4108  |
| 95%   | 12603.7237 | 13157.5442 | 13731.8019 | 14197.1674 | 14717.2457 | 15263.0047 | 15811.8107 | 16268.1213 | 16763.8683 | 17308.4133 |
| 97.5% | 20530.4345 | 21437.7449 | 22438.2995 | 23397.1186 | 24541.8292 | 25509.2335 | 26672.5830 | 27699.2440 | 28807.6876 | 29826.8449 |
| 99%   | 33556.1223 | 35516.0349 | 37741.4785 | 39872.2655 | 41768.8839 | 43777.4404 | 45520.4742 | 47453.5922 | 49855.8979 | 51872.9223 |

Table 69: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and linear trend and 4 regressors for the Parzen kernel.



|       |            |            |            |            |            |            |            |            |            |            |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
| 90%   | 10.1846    | 15.3948    | 24.2649    | 39.2935    | 65.0683    | 108.8789   | 178.7616   | 283.8074   | 427.9634   | 608.5129   |
| 95%   | 12.6026    | 19.4269    | 30.9512    | 51.2326    | 86.4355    | 146.4113   | 242.9462   | 389.9676   | 592.2249   | 846.2534   |
| 97.5% | 15.0423    | 23.4392    | 37.9805    | 63.7307    | 109.4498   | 188.9767   | 319.4201   | 512.5165   | 787.3699   | 1122.5664  |
| 99%   | 18.1023    | 28.6298    | 47.7411    | 82.1291    | 144.4228   | 253.1844   | 434.2483   | 713.0437   | 1071.7364  | 1528.1432  |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 812.2880   | 1029.4717  | 1246.6665  | 1460.4436  | 1663.9445  | 1862.2237  | 2058.1001  | 2264.1017  | 2479.5580  | 2708.3160  |
| 95%   | 1138.3409  | 1450.3503  | 1775.8990  | 2083.0598  | 2395.0680  | 2702.6841  | 3022.3508  | 3360.0127  | 3724.6006  | 4084.0115  |
| 97.5% | 1500.6770  | 1906.7293  | 2342.2016  | 2770.2706  | 3204.4368  | 3658.3167  | 4118.2139  | 4628.3690  | 5165.7813  | 5779.3860  |
| 99%   | 2048.1164  | 2600.0155  | 3167.6411  | 3752.9532  | 4377.7131  | 5033.1955  | 5740.0453  | 6460.3982  | 7249.0141  | 8194.5503  |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 2949.2474  | 3216.1875  | 3477.6174  | 3757.6320  | 4039.8429  | 4343.0530  | 4651.7471  | 4943.3229  | 5257.0680  | 5590.2249  |
| 95%   | 4507.1923  | 4970.7508  | 5453.2996  | 6002.5490  | 6584.7932  | 7164.2096  | 7764.2374  | 8357.6397  | 8943.0448  | 9557.9383  |
| 97.5% | 6420.4337  | 7071.1294  | 7737.3081  | 8477.4528  | 9329.6839  | 10245.2929 | 11238.0355 | 12178.9819 | 13097.5083 | 14167.0379 |
| 99%   | 9225.5921  | 10207.4745 | 11212.9468 | 12474.9480 | 13822.8861 | 15135.9195 | 16765.8286 | 18233.1813 | 19838.8800 | 21619.2829 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 5884.6570  | 6202.1361  | 6531.0082  | 6840.8856  | 7141.1569  | 7447.7612  | 7714.6191  | 8007.1395  | 8302.9204  | 8590.5658  |
| 95%   | 10217.8571 | 10843.0754 | 11488.3750 | 12161.3434 | 12857.8834 | 13531.8178 | 14248.4792 | 14925.5854 | 15609.9000 | 16364.8981 |
| 97.5% | 15210.8601 | 16313.1460 | 17448.0407 | 18595.9766 | 19644.2589 | 20817.4706 | 22145.3337 | 23456.8905 | 24741.0955 | 26013.4122 |
| 99%   | 23497.2093 | 25112.4788 | 26921.0423 | 28651.5770 | 30484.3757 | 32809.7089 | 34576.9444 | 36520.9293 | 38922.1861 | 41216.6914 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 8852.4901  | 9112.8903  | 9375.7015  | 9632.4054  | 9902.5584  | 10117.8625 | 10374.1294 | 10607.9963 | 10833.9000 | 11110.5006 |
| 95%   | 17095.9391 | 17837.3558 | 18538.1374 | 19347.0063 | 20033.1372 | 20771.2314 | 21544.1571 | 22249.3081 | 23087.8667 | 23974.9595 |
| 97.5% | 27438.1672 | 28934.5610 | 30327.2719 | 31867.1518 | 33379.5224 | 34811.4304 | 36422.5121 | 38042.1034 | 39574.9261 | 40934.1066 |
| 99%   | 43524.2952 | 46445.8033 | 49216.6341 | 51669.1997 | 54002.7068 | 56183.3330 | 58701.6523 | 61818.3306 | 63764.2750 | 67529.9973 |

Table 70: Fixed-b critical values for Wald test for 4 hypotheses in regression with intercept and linear trend and 4 regressors for the Parzen kernel.

## 6 Quadratic Spectral Kernel (Intercept and Linear Trend)

### 6.1 t-Test

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 95%   | 1.7982   | 2.0724   | 2.4646   | 3.0116   | 3.7859   | 4.8813   | 6.4061   | 8.3765   | 10.7553  | 13.4490  |
| 97.5% | 2.1707   | 2.5294   | 3.0464   | 3.7805   | 4.8410   | 6.3786   | 8.5132   | 11.2974  | 14.8323  | 18.9382  |
| 99%   | 2.6242   | 3.0984   | 3.7909   | 4.7949   | 6.3078   | 8.4987   | 11.6334  | 15.9679  | 21.3237  | 27.8156  |
| 99.5% | 2.9460   | 3.5139   | 4.4043   | 5.6375   | 7.5702   | 10.2652  | 14.3891  | 20.1745  | 27.3806  | 35.7268  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 16.3005  | 18.9886  | 21.2910  | 23.3393  | 25.0138  | 26.3593  | 27.3506  | 28.2323  | 28.9804  | 29.5670  |
| 97.5% | 23.5593  | 27.9150  | 32.1770  | 35.4208  | 38.6193  | 41.3126  | 43.6400  | 45.4838  | 47.1730  | 48.4378  |
| 99%   | 35.1726  | 42.9050  | 50.0649  | 56.7438  | 63.3087  | 69.4348  | 74.9918  | 78.8879  | 83.4179  | 86.3930  |
| 99.5% | 45.7852  | 56.7585  | 67.2052  | 77.0578  | 87.0417  | 96.4049  | 104.4872 | 111.7362 | 118.7259 | 124.7642 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 30.0956  | 30.4561  | 30.8237  | 31.1322  | 31.4281  | 31.6602  | 31.8117  | 31.9790  | 32.1482  | 32.3122  |
| 97.5% | 49.6952  | 50.8618  | 51.6579  | 52.2813  | 52.8846  | 53.4818  | 54.2187  | 54.7017  | 55.2818  | 55.7607  |
| 99%   | 89.1681  | 92.1808  | 95.2172  | 97.6005  | 98.8178  | 100.5661 | 102.1743 | 103.7071 | 105.2516 | 106.7487 |
| 99.5% | 129.0045 | 132.2438 | 136.4854 | 140.2862 | 144.9044 | 148.8578 | 151.0652 | 153.7319 | 156.6000 | 159.0701 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 32.5151  | 32.6943  | 32.8450  | 33.0435  | 33.1521  | 33.2954  | 33.4204  | 33.5066  | 33.6120  | 33.7238  |
| 97.5% | 56.2835  | 56.7310  | 57.3276  | 57.8786  | 58.4230  | 58.7878  | 59.2459  | 59.7158  | 60.1951  | 60.6491  |
| 99%   | 107.9953 | 109.2638 | 110.5262 | 112.1289 | 113.2850 | 114.0924 | 114.9326 | 115.9224 | 117.4869 | 119.1482 |
| 99.5% | 161.6683 | 164.9273 | 167.4208 | 169.0556 | 171.5271 | 174.3237 | 176.4336 | 179.1262 | 181.6782 | 184.5013 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 33.8218  | 33.9528  | 34.1004  | 34.2207  | 34.3280  | 34.4610  | 34.5982  | 34.7418  | 34.8680  | 34.9618  |
| 97.5% | 60.8623  | 61.3006  | 61.9220  | 62.2391  | 62.6951  | 63.1645  | 63.5313  | 63.9878  | 64.5399  | 64.8551  |
| 99%   | 120.9664 | 122.0484 | 123.9309 | 126.3525 | 127.8978 | 129.3647 | 130.6118 | 131.8814 | 133.5832 | 135.7839 |
| 99.5% | 186.7718 | 189.7851 | 192.2385 | 194.8985 | 198.0869 | 201.1778 | 202.8456 | 206.3410 | 210.0037 | 212.9486 |

Table 71: Fixed-b critical values for t-test in regression with intercept and linear trend and 1 regressors for the Quadratic Spectral kernel (Upper tail).

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 95%   | 1.9132   | 2.4040   | 3.1818   | 4.4299   | 6.4564   | 9.4704   | 13.4568  | 18.0193  | 22.3860  | 26.1671  |
| 97.5% | 2.2997   | 2.9352   | 3.9262   | 5.6312   | 8.3816   | 12.5803  | 18.2975  | 24.9957  | 32.3047  | 39.0561  |
| 99%   | 2.7677   | 3.5664   | 4.9236   | 7.2613   | 11.0715  | 17.3335  | 25.5843  | 36.2371  | 48.1278  | 59.4941  |
| 99.5% | 3.0812   | 4.0785   | 5.6981   | 8.5640   | 13.4667  | 21.2844  | 32.2859  | 46.3597  | 62.2105  | 80.2632  |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 29.5811  | 32.1506  | 34.1217  | 35.4750  | 36.5296  | 37.2096  | 37.7722  | 38.2757  | 38.6690  | 38.9930  |
| 97.5% | 45.1426  | 50.2688  | 54.7032  | 57.9683  | 60.5922  | 62.8071  | 64.4987  | 65.9647  | 67.2649  | 68.5048  |
| 99%   | 71.6917  | 82.6217  | 91.4209  | 98.8102  | 105.1395 | 109.9651 | 115.5931 | 119.6766 | 122.7418 | 125.1456 |
| 99.5% | 97.6981  | 115.8936 | 132.0822 | 144.4624 | 154.3023 | 162.6371 | 170.8537 | 178.7360 | 185.4868 | 190.8787 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 39.2556  | 39.6095  | 39.7818  | 40.0819  | 40.2680  | 40.4845  | 40.7291  | 40.9448  | 41.1049  | 41.3057  |
| 97.5% | 69.6740  | 70.6809  | 71.6973  | 72.3505  | 73.3219  | 73.8343  | 74.4657  | 75.2161  | 75.5390  | 75.9402  |
| 99%   | 127.8576 | 130.4327 | 133.4609 | 136.4873 | 139.1530 | 141.8260 | 143.6317 | 145.9569 | 146.3344 | 148.2115 |
| 99.5% | 195.5261 | 201.2992 | 205.6418 | 208.5393 | 212.1301 | 216.5983 | 220.9104 | 224.4689 | 227.5413 | 230.7925 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 41.4767  | 41.6472  | 41.8145  | 41.9462  | 42.0363  | 42.1226  | 42.2441  | 42.3772  | 42.4512  | 42.6156  |
| 97.5% | 76.4424  | 76.8387  | 76.9934  | 77.0728  | 77.3955  | 77.7173  | 77.9606  | 78.6240  | 78.8007  | 78.9243  |
| 99%   | 150.3170 | 151.9502 | 152.9601 | 153.5238 | 154.4651 | 156.5257 | 159.9621 | 161.3791 | 162.5431 | 163.7757 |
| 99.5% | 233.7954 | 237.0995 | 241.0025 | 244.9788 | 247.3414 | 249.9600 | 252.5100 | 256.5202 | 261.3166 | 265.3698 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 42.7377  | 42.8967  | 43.0425  | 43.1233  | 43.2759  | 43.4239  | 43.4712  | 43.4958  | 43.5961  | 43.6828  |
| 97.5% | 79.2995  | 79.4686  | 79.9017  | 80.3111  | 80.7287  | 81.2222  | 81.6336  | 81.9947  | 82.6170  | 82.9894  |
| 99%   | 165.6845 | 167.1155 | 169.8492 | 170.9654 | 172.4973 | 174.2769 | 174.9551 | 176.3487 | 177.5414 | 178.4917 |
| 99.5% | 266.9071 | 271.6113 | 273.4973 | 277.5264 | 281.5359 | 286.3895 | 290.3742 | 293.5970 | 298.4507 | 303.4329 |

Table 72: Fixed-b critical values for t-test in regression with intercept and linear trend and 2 regressors for the Quadratic Spectral kernel (Upper tail).

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 95%   | 2.0285   | 2.8076   | 4.2056   | 6.8119   | 11.1526  | 17.1102  | 23.7555  | 29.7499  | 34.5189  | 38.0679  |
| 97.5% | 2.4381   | 3.4162   | 5.2729   | 8.8095   | 14.8531  | 23.5488  | 33.6404  | 43.8408  | 52.7940  | 60.2166  |
| 99%   | 2.9152   | 4.1719   | 6.7088   | 11.6323  | 20.2277  | 33.4510  | 49.5100  | 67.2325  | 83.7557  | 97.9934  |
| 99.5% | 3.2604   | 4.7947   | 7.7744   | 13.7771  | 24.7613  | 41.8257  | 62.4681  | 87.4181  | 111.7121 | 136.3534 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 40.4914  | 42.2284  | 43.3850  | 44.2295  | 44.8355  | 45.4109  | 45.8415  | 46.2544  | 46.6539  | 46.8943  |
| 97.5% | 65.5541  | 69.4740  | 72.3687  | 74.5505  | 76.7988  | 78.1891  | 79.6900  | 80.9974  | 81.9756  | 82.9402  |
| 99%   | 109.8513 | 118.9551 | 126.3509 | 133.2193 | 138.1750 | 143.0101 | 146.7721 | 150.8955 | 154.2870 | 157.7645 |
| 99.5% | 158.0352 | 172.1708 | 187.7987 | 199.0435 | 209.3104 | 216.3381 | 222.3012 | 229.7076 | 234.0942 | 240.4884 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 47.3014  | 47.5002  | 47.7603  | 47.9810  | 48.0822  | 48.3411  | 48.4640  | 48.6883  | 48.8476  | 49.0222  |
| 97.5% | 83.9811  | 85.1097  | 85.9069  | 86.6781  | 87.4849  | 87.9968  | 88.4061  | 88.9561  | 89.3621  | 89.7463  |
| 99%   | 159.9086 | 163.5576 | 166.2287 | 168.2827 | 170.2475 | 172.4493 | 174.8153 | 177.1783 | 179.5389 | 181.9767 |
| 99.5% | 247.4116 | 252.7123 | 256.6692 | 262.2890 | 266.4137 | 270.2199 | 273.9383 | 276.4219 | 281.1740 | 285.5192 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 49.1410  | 49.3024  | 49.4003  | 49.4574  | 49.6017  | 49.7782  | 49.8483  | 49.9029  | 49.9535  | 50.0065  |
| 97.5% | 90.2470  | 91.0470  | 91.5836  | 91.5923  | 92.1492  | 92.5543  | 93.2651  | 93.5511  | 93.8901  | 94.3668  |
| 99%   | 183.5908 | 185.9725 | 187.1691 | 189.6914 | 191.6940 | 193.0039 | 194.1221 | 196.3037 | 197.2346 | 198.9934 |
| 99.5% | 288.7387 | 291.0361 | 294.5658 | 297.4641 | 299.5344 | 301.2582 | 304.5508 | 306.8220 | 309.5758 | 314.0596 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 50.1100  | 50.1563  | 50.1855  | 50.2072  | 50.2299  | 50.2910  | 50.3036  | 50.3172  | 50.3840  | 50.4584  |
| 97.5% | 94.6077  | 94.9165  | 95.2273  | 95.6539  | 95.9312  | 96.1800  | 96.3869  | 96.5867  | 96.8104  | 96.9191  |
| 99%   | 200.7007 | 202.6195 | 204.0867 | 205.0927 | 207.3160 | 208.4461 | 210.8929 | 212.7736 | 214.5724 | 215.6566 |
| 99.5% | 318.9521 | 321.8655 | 326.7723 | 331.3128 | 334.7218 | 338.2072 | 341.5923 | 345.7562 | 349.9318 | 354.0348 |

Table 73: Fixed-b critical values for t-test in regression with intercept and linear trend and 3 regressors for the Quadratic Spectral kernel (Upper tail).

|       | 0.02     | 0.04     | 0.06     | 0.08     | 0.10     | 0.12     | 0.14     | 0.16     | 0.18     | 0.20     |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 95%   | 2.1548   | 3.3175   | 5.7673   | 10.6959  | 18.3278  | 27.0197  | 34.7529  | 40.4229  | 44.3104  | 46.5385  |
| 97.5% | 2.5975   | 4.0621   | 7.2478   | 13.9522  | 24.4995  | 37.6499  | 51.1288  | 62.3287  | 71.2249  | 77.5354  |
| 99%   | 3.1068   | 5.0119   | 9.3519   | 18.4124  | 34.2297  | 54.9990  | 77.4712  | 99.7295  | 117.9726 | 132.9452 |
| 99.5% | 3.4773   | 5.7413   | 10.9274  | 22.2483  | 42.1699  | 70.3119  | 103.0722 | 134.2259 | 163.4801 | 190.5858 |
|       | 0.22     | 0.24     | 0.26     | 0.28     | 0.30     | 0.32     | 0.34     | 0.36     | 0.38     | 0.40     |
| 95%   | 47.8589  | 49.0064  | 49.7097  | 50.2581  | 50.7642  | 51.2453  | 51.6504  | 52.0221  | 52.4253  | 52.9061  |
| 97.5% | 81.4933  | 84.4824  | 87.0522  | 88.7251  | 90.6025  | 91.7464  | 92.8591  | 93.8948  | 94.8514  | 95.8776  |
| 99%   | 142.6152 | 150.3231 | 156.2833 | 162.1041 | 166.8165 | 170.5808 | 174.5644 | 179.2885 | 182.3596 | 185.2543 |
| 99.5% | 208.6764 | 224.1931 | 238.3310 | 248.1228 | 255.7802 | 263.1278 | 270.6604 | 276.4116 | 282.8349 | 288.1817 |
|       | 0.42     | 0.44     | 0.46     | 0.48     | 0.50     | 0.52     | 0.54     | 0.56     | 0.58     | 0.60     |
| 95%   | 53.1817  | 53.5717  | 53.8371  | 54.0437  | 54.4284  | 54.6553  | 54.8188  | 54.9214  | 55.0080  | 55.0942  |
| 97.5% | 96.7399  | 97.5712  | 98.5083  | 99.6131  | 100.4502 | 101.1477 | 102.0291 | 102.2784 | 102.6269 | 102.9959 |
| 99%   | 189.3776 | 193.1711 | 195.7267 | 197.8334 | 200.6641 | 203.9160 | 205.4703 | 207.6109 | 209.7205 | 211.4178 |
| 99.5% | 295.0105 | 300.0685 | 304.3152 | 311.1988 | 317.8036 | 322.0098 | 327.8156 | 332.5943 | 337.7185 | 341.5629 |
|       | 0.62     | 0.64     | 0.66     | 0.68     | 0.70     | 0.72     | 0.74     | 0.76     | 0.78     | 0.80     |
| 95%   | 55.2298  | 55.3218  | 55.2747  | 55.3349  | 55.4145  | 55.4997  | 55.5632  | 55.6102  | 55.6841  | 55.7180  |
| 97.5% | 103.0756 | 103.6061 | 104.0674 | 104.2647 | 104.7271 | 105.3739 | 105.5668 | 105.7236 | 106.1293 | 107.1268 |
| 99%   | 214.2925 | 216.2113 | 217.9868 | 220.0644 | 221.8177 | 224.1335 | 226.8173 | 230.2906 | 232.3807 | 234.0691 |
| 99.5% | 345.1153 | 351.2686 | 353.7991 | 356.7271 | 357.9289 | 360.6853 | 365.1683 | 368.4668 | 371.9905 | 376.9709 |
|       | 0.82     | 0.84     | 0.86     | 0.88     | 0.90     | 0.92     | 0.94     | 0.96     | 0.98     | 1.00     |
| 95%   | 55.7746  | 55.8626  | 55.9611  | 55.9994  | 56.0613  | 56.0590  | 56.1225  | 56.1602  | 56.1854  | 56.2017  |
| 97.5% | 107.4128 | 107.6252 | 107.7746 | 107.9874 | 108.3290 | 108.5892 | 108.6272 | 108.7646 | 109.0700 | 109.5377 |
| 99%   | 235.4098 | 236.4798 | 239.1595 | 240.8548 | 242.2260 | 243.6067 | 244.6695 | 246.0141 | 247.4862 | 247.4770 |
| 99.5% | 381.8634 | 386.1152 | 392.7536 | 395.9925 | 401.2547 | 406.7797 | 415.0546 | 417.9691 | 419.5848 | 423.7985 |

Table 74: Fixed-b critical values for t-test in regression with intercept and linear trend and 4 regressors for the Quadratic Spectral kernel (Upper tail).

## 6.2 Wald Test

|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 90%   | 3.2557     | 4.3797     | 6.1367     | 9.1404     | 14.4541    | 23.9599    | 41.1985    | 70.3040    | 116.3498   | 183.2623   |
| 95%   | 4.6915     | 6.4147     | 9.2556     | 14.1339    | 23.3535    | 40.6113    | 71.5527    | 127.8665   | 219.9475   | 357.4878   |
| 97.5% | 6.2143     | 8.6389     | 12.7965    | 20.1671    | 34.4947    | 62.2594    | 116.5678   | 216.6863   | 382.4036   | 643.4326   |
| 99%   | 8.4180     | 12.0181    | 18.1187    | 30.5865    | 55.1671    | 104.5586   | 203.0933   | 386.6336   | 710.7822   | 1248.8327  |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 267.1352   | 362.5589   | 457.9490   | 544.0813   | 621.0349   | 693.0405   | 755.5391   | 804.5094   | 848.2966   | 881.8323   |
| 95%   | 546.6826   | 766.8418   | 1015.8252  | 1247.9826  | 1467.6130  | 1682.3713  | 1878.8102  | 2066.7877  | 2243.2938  | 2371.2536  |
| 97.5% | 1002.4395  | 1456.0725  | 2012.5301  | 2558.7497  | 3116.1149  | 3688.1498  | 4173.7194  | 4749.1335  | 5154.4668  | 5620.8186  |
| 99%   | 2034.1180  | 3148.6984  | 4509.9682  | 5916.0047  | 7408.6093  | 9030.7686  | 10731.0357 | 12393.9410 | 13931.5661 | 15422.1936 |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 912.3930   | 936.6282   | 959.9276   | 975.2959   | 994.0152   | 1007.6228  | 1020.6512  | 1032.3656  | 1044.2006  | 1051.2321  |
| 95%   | 2494.0476  | 2599.4906  | 2683.9718  | 2763.7101  | 2841.5765  | 2906.0272  | 2977.5193  | 3047.5408  | 3115.7779  | 3152.7523  |
| 97.5% | 5948.3928  | 6307.0147  | 6642.3523  | 6947.2401  | 7175.1668  | 7419.9657  | 7631.5518  | 7847.4462  | 8065.5559  | 8251.3539  |
| 99%   | 16674.2977 | 17861.9523 | 19058.8734 | 19991.4233 | 21013.6623 | 21909.0791 | 22754.2338 | 23653.9919 | 24328.0610 | 24887.0766 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 1060.3946  | 1069.9071  | 1077.6387  | 1086.1695  | 1098.5493  | 1105.6759  | 1116.0309  | 1127.0576  | 1141.3314  | 1147.3083  |
| 95%   | 3202.6751  | 3248.3312  | 3299.6203  | 3354.6344  | 3404.6690  | 3441.0756  | 3487.7033  | 3548.9695  | 3606.8981  | 3664.4273  |
| 97.5% | 8381.7507  | 8604.7535  | 8787.2931  | 8980.0973  | 9198.1799  | 9386.5298  | 9518.0409  | 9702.6341  | 9951.6411  | 10252.5561 |
| 99%   | 25573.5677 | 26373.0730 | 27175.1445 | 27839.5989 | 28680.5244 | 29529.7138 | 30352.2621 | 31433.7127 | 32138.1576 | 32963.9497 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 1154.8374  | 1164.7574  | 1174.1993  | 1182.0224  | 1187.5461  | 1193.9596  | 1200.8998  | 1205.0435  | 1212.8064  | 1218.3005  |
| 95%   | 3707.5309  | 3741.3914  | 3795.6356  | 3849.8373  | 3906.4835  | 3964.3202  | 4014.4187  | 4039.8421  | 4103.1953  | 4150.1711  |
| 97.5% | 10424.5195 | 10640.6622 | 10834.3134 | 11104.5947 | 11361.8590 | 11601.9701 | 11850.2441 | 12004.0902 | 12210.5011 | 12419.6330 |
| 99%   | 33615.8517 | 34664.6735 | 35408.7678 | 36520.9132 | 37457.4797 | 38427.3888 | 39315.4445 | 40460.4054 | 41694.4960 | 42743.0697 |

Table 75: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 1 regressors for the Quadratic Spectral kernel.

|       |            |            |            |            |            |            |            |            |            |            |
|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|       | 0.02       | 0.04       | 0.06       | 0.08       | 0.10       | 0.12       | 0.14       | 0.16       | 0.18       | 0.20       |
| 90%   | 3.6412     | 5.7667     | 10.0920    | 19.5944    | 41.7081    | 89.4360    | 180.2865   | 324.0395   | 496.8670   | 687.7138   |
| 95%   | 5.2199     | 8.5161     | 15.4055    | 31.4590    | 69.5458    | 158.2591   | 336.9048   | 636.6602   | 1041.7515  | 1520.6952  |
| 97.5% | 6.9411     | 11.5124    | 21.4268    | 46.1639    | 108.4914   | 259.4289   | 572.1242   | 1146.1015  | 2027.5843  | 3112.0805  |
| 99%   | 9.3263     | 15.8781    | 31.2309    | 71.4440    | 178.2316   | 457.2925   | 1074.3570  | 2224.5509  | 4062.3018  | 6663.1234  |
|       | 0.22       | 0.24       | 0.26       | 0.28       | 0.30       | 0.32       | 0.34       | 0.36       | 0.38       | 0.40       |
| 90%   | 864.1741   | 1018.3766  | 1149.1099  | 1245.2835  | 1313.4867  | 1370.2440  | 1415.4478  | 1457.9081  | 1488.0660  | 1515.2333  |
| 95%   | 2057.5730  | 2581.8309  | 3029.3550  | 3400.2375  | 3674.3133  | 3930.0804  | 4141.0388  | 4337.1661  | 4493.3816  | 4662.2885  |
| 97.5% | 4345.4806  | 5643.7963  | 6815.9176  | 7788.3369  | 8861.3295  | 9693.0672  | 10439.3179 | 11109.9661 | 11662.5444 | 12181.7508 |
| 99%   | 9879.5253  | 13323.9261 | 17025.3569 | 20297.6702 | 23963.1909 | 26781.1963 | 29660.9489 | 32664.1966 | 34403.1134 | 36856.7619 |
|       | 0.42       | 0.44       | 0.46       | 0.48       | 0.50       | 0.52       | 0.54       | 0.56       | 0.58       | 0.60       |
| 90%   | 1539.1653  | 1565.3111  | 1583.9397  | 1603.3017  | 1620.8942  | 1634.3479  | 1648.5061  | 1660.6542  | 1668.1609  | 1683.1354  |
| 95%   | 4815.8133  | 4930.4119  | 5061.4779  | 5186.0373  | 5304.8473  | 5413.9350  | 5509.9510  | 5605.2183  | 5709.1477  | 5796.3211  |
| 97.5% | 12594.3463 | 13178.3130 | 13707.6980 | 14090.8258 | 14495.6268 | 14835.8248 | 15246.1372 | 15553.8542 | 15904.3232 | 16320.7694 |
| 99%   | 38772.3452 | 40312.6348 | 41653.1290 | 43126.6475 | 44536.8706 | 46752.5754 | 48398.9028 | 50011.3663 | 51201.2564 | 52384.2748 |
|       | 0.62       | 0.64       | 0.66       | 0.68       | 0.70       | 0.72       | 0.74       | 0.76       | 0.78       | 0.80       |
| 90%   | 1694.4510  | 1706.0530  | 1717.4434  | 1731.8503  | 1744.5441  | 1757.5434  | 1766.2412  | 1777.6540  | 1791.2423  | 1799.1960  |
| 95%   | 5877.4805  | 5947.3840  | 6027.8041  | 6106.4956  | 6219.2385  | 6299.4677  | 6355.0359  | 6406.5725  | 6470.7252  | 6532.0238  |
| 97.5% | 16611.5313 | 16847.9404 | 17183.5201 | 17585.1649 | 17962.1898 | 18310.2031 | 18563.3333 | 18983.1682 | 19394.1949 | 19736.5795 |
| 99%   | 54380.3342 | 56250.2258 | 57933.7904 | 59089.4079 | 61007.3499 | 62521.0980 | 63303.2570 | 64647.8978 | 65975.9458 | 67708.0204 |
|       | 0.82       | 0.84       | 0.86       | 0.88       | 0.90       | 0.92       | 0.94       | 0.96       | 0.98       | 1.00       |
| 90%   | 1805.2896  | 1816.4208  | 1826.3760  | 1833.7247  | 1841.7891  | 1846.5769  | 1853.7493  | 1859.8032  | 1866.8411  | 1869.5673  |
| 95%   | 6624.3492  | 6700.1387  | 6750.4467  | 6817.4510  | 6891.5603  | 6973.3251  | 7020.4806  | 7100.0284  | 7165.5123  | 7222.5784  |
| 97.5% | 20224.8395 | 20561.5712 | 20900.7267 | 21221.4575 | 21653.1775 | 22008.5795 | 22542.5346 | 22997.8539 | 23424.4717 | 23778.0290 |
| 99%   | 68507.7172 | 70601.2656 | 73229.4226 | 75283.0710 | 77334.6984 | 79316.9478 | 81864.0147 | 84822.2345 | 86446.0182 | 88370.2514 |

Table 76: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 2 regressors for the Quadratic Spectral kernel.



|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 6.2446      | 10.1066     | 18.1005     | 36.2621     | 79.0386     | 174.8875    | 359.5006    | 662.3240    | 1055.3596   | 1501.8795   |
| 95%   | 8.2896      | 13.8413     | 25.7606     | 54.0668     | 124.8008    | 289.7494    | 622.5084    | 1203.1452   | 2054.2783   | 3091.5690   |
| 97.5% | 10.4304     | 17.7217     | 34.4084     | 76.0854     | 186.1863    | 449.5824    | 1009.6404   | 2055.6723   | 3637.6216   | 5824.5926   |
| 99%   | 13.2083     | 23.5282     | 48.4709     | 114.4463    | 290.6659    | 749.3615    | 1774.9063   | 3901.7949   | 7233.2644   | 12099.6441  |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 1936.2806   | 2320.2392   | 2629.3332   | 2875.5381   | 3056.0488   | 3213.3102   | 3337.0290   | 3445.0158   | 3536.4482   | 3609.1485   |
| 95%   | 4249.8777   | 5340.2198   | 6356.9736   | 7176.9026   | 7850.0665   | 8468.2028   | 8994.1748   | 9463.3233   | 9897.2778   | 10226.3565  |
| 97.5% | 8355.5410   | 11217.8171  | 13980.8539  | 16450.2396  | 18478.8757  | 20515.2334  | 22169.1292  | 23785.0483  | 25199.9171  | 26409.5971  |
| 99%   | 18582.3821  | 25728.1783  | 34078.2692  | 42505.3780  | 50183.9601  | 57158.6945  | 62735.4481  | 68214.8849  | 72847.9269  | 78523.5816  |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 3670.1511   | 3743.7015   | 3808.2285   | 3869.4882   | 3916.6890   | 3968.5114   | 4010.5765   | 4051.2501   | 4088.6196   | 4111.1827   |
| 95%   | 10526.5274  | 10905.5302  | 11157.3327  | 11499.9052  | 11844.0724  | 12142.9666  | 12399.4067  | 12610.4207  | 12858.1248  | 13082.7259  |
| 97.5% | 27588.6857  | 28676.4532  | 29899.7136  | 31044.5146  | 31837.8160  | 32718.1448  | 33611.2701  | 34402.4011  | 35350.2647  | 36140.2563  |
| 99%   | 83043.0552  | 88128.5791  | 92492.9695  | 96865.1749  | 100797.2390 | 104902.3076 | 108236.8308 | 110849.6969 | 113435.4519 | 117219.9293 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 4152.4801   | 4172.7704   | 4191.3179   | 4226.6762   | 4259.7374   | 4294.2535   | 4318.9844   | 4348.1311   | 4366.0926   | 4405.2170   |
| 95%   | 13309.1005  | 13529.7131  | 13730.3835  | 13849.0907  | 13994.3240  | 14198.2106  | 14456.0959  | 14657.3713  | 14916.5933  | 15148.9877  |
| 97.5% | 36809.8913  | 37780.9506  | 38611.8096  | 39546.6014  | 40277.6297  | 41740.5636  | 42622.9903  | 43389.3867  | 44487.1644  | 45416.6821  |
| 99%   | 119623.7503 | 122614.0855 | 125710.5248 | 128662.6553 | 131688.4576 | 135793.1038 | 140499.0956 | 143049.6048 | 147756.2183 | 151283.5946 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 4426.2527   | 4447.5673   | 4477.8062   | 4507.3185   | 4539.4135   | 4577.4764   | 4578.2284   | 4596.8924   | 4617.6199   | 4626.6134   |
| 95%   | 15335.5739  | 15555.7793  | 15725.2195  | 15916.9009  | 16141.9330  | 16361.0980  | 16555.3767  | 16844.0365  | 16960.1796  | 17116.7743  |
| 97.5% | 46492.9807  | 47498.1419  | 48327.1541  | 49384.7665  | 50425.2771  | 51364.3968  | 52434.9193  | 53294.6808  | 53820.2376  | 54737.1850  |
| 99%   | 156034.6203 | 161759.9828 | 166745.5052 | 170939.6352 | 176903.6785 | 182544.0116 | 185700.2307 | 189865.0830 | 196479.6765 | 202212.8195 |

Table 77: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and linear trend and 2 regressors for the Quadratic Spectral kernel.

|       | 0.02       | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 4.1212     | 7.8649      | 17.7565     | 46.4611     | 125.9852    | 295.2465    | 566.6399    | 888.1918    | 1198.1110   | 1454.9083   |
| 95%   | 5.9434     | 11.6875     | 27.5935     | 77.3847     | 218.8386    | 545.6487    | 1123.4924   | 1926.6358   | 2816.5174   | 3647.9793   |
| 97.5% | 7.9374     | 16.0859     | 39.6088     | 117.3103    | 350.3614    | 931.3640    | 2055.1976   | 3749.0029   | 5792.5062   | 7823.8398   |
| 99%   | 10.6786    | 22.6051     | 60.0001     | 186.9572    | 612.1246    | 1702.1916   | 4002.3005   | 7675.2623   | 12278.0516  | 18191.9321  |
|       | 0.22       | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 1642.7896  | 1779.5781   | 1870.5080   | 1947.4998   | 2010.0673   | 2063.7938   | 2109.5053   | 2143.3474   | 2180.7734   | 2209.5557   |
| 95%   | 4338.1053  | 4905.5326   | 5298.4858   | 5645.1331   | 5922.3420   | 6160.4049   | 6383.8454   | 6607.8256   | 6802.8276   | 6972.7853   |
| 97.5% | 9806.5581  | 11443.0274  | 12706.0104  | 13733.5086  | 14656.0145  | 15526.8651  | 16360.3516  | 17151.2277  | 17840.0137  | 18635.1527  |
| 99%   | 23882.9727 | 29174.6415  | 34064.5170  | 38132.9391  | 41774.0125  | 44919.3389  | 47860.4667  | 50170.8802  | 52554.4962  | 54858.6189  |
|       | 0.42       | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 2238.0324  | 2262.0765   | 2285.2291   | 2307.5155   | 2330.0165   | 2352.3831   | 2367.5537   | 2380.5925   | 2395.3582   | 2407.6645   |
| 95%   | 7095.8929  | 7239.7849   | 7338.0681   | 7486.4454   | 7612.9160   | 7753.6833   | 7871.9167   | 7973.2497   | 8050.3001   | 8132.4305   |
| 97.5% | 19126.1108 | 19678.3137  | 20340.0428  | 20925.7942  | 21344.8390  | 21874.7106  | 22297.2081  | 22693.7198  | 23155.7637  | 23535.7008  |
| 99%   | 57438.6152 | 59852.9569  | 62298.1337  | 64392.6602  | 66983.4641  | 69935.3644  | 71826.5978  | 73188.9687  | 74951.7285  | 77194.9025  |
|       | 0.62       | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 2422.6351  | 2433.2142   | 2441.1678   | 2451.4947   | 2460.8034   | 2473.5756   | 2480.2767   | 2489.5090   | 2495.8294   | 2503.2607   |
| 95%   | 8232.4483  | 8337.8358   | 8405.8718   | 8464.9086   | 8505.8387   | 8603.3061   | 8689.2218   | 8778.6519   | 8843.8466   | 8932.0297   |
| 97.5% | 23845.1530 | 24078.1906  | 24411.8303  | 24897.4018  | 25356.6367  | 25755.5185  | 26312.7456  | 26717.1506  | 27115.0440  | 27579.4804  |
| 99%   | 79239.6283 | 80358.2722  | 82245.2049  | 83570.7858  | 86093.6217  | 88110.2949  | 89902.8027  | 92069.9458  | 94618.7305  | 96677.8506  |
|       | 0.82       | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 2511.8843  | 2515.0255   | 2528.0620   | 2538.3597   | 2540.6903   | 2548.7106   | 2552.5582   | 2561.3092   | 2568.8912   | 2574.4200   |
| 95%   | 9002.6145  | 9046.0021   | 9160.5929   | 9212.3761   | 9316.0064   | 9374.0431   | 9457.3222   | 9500.1249   | 9566.2691   | 9636.2226   |
| 97.5% | 27923.5052 | 28382.5870  | 28710.4467  | 29246.2628  | 29788.7720  | 30185.8729  | 30556.9376  | 30842.3934  | 31081.2478  | 31412.2878  |
| 99%   | 98716.7583 | 101283.3542 | 104829.1896 | 108651.9069 | 111455.1543 | 114897.0183 | 117169.0829 | 120422.7240 | 122878.6746 | 125417.7795 |

Table 78: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 3 regressors for the Quadratic Spectral kernel.

|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 7.1203      | 13.9106     | 32.4728     | 88.4422     | 247.9706    | 600.1054    | 1188.2482   | 1967.3611   | 2768.1644   | 3412.2843   |
| 95%   | 9.4344      | 19.0740     | 47.0342     | 137.0143    | 405.7582    | 1038.3326   | 2259.8242   | 4012.7197   | 6041.2968   | 7928.1222   |
| 97.5% | 11.9287     | 24.7549     | 64.0323     | 200.3509    | 623.5403    | 1716.2968   | 3858.3423   | 7152.8283   | 11357.2559  | 16114.1629  |
| 99%   | 15.2468     | 33.2090     | 91.4821     | 312.6733    | 1022.0668   | 2945.9279   | 7048.1215   | 14334.3066  | 23993.8675  | 35585.2351  |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 3903.9157   | 4257.0047   | 4525.7204   | 4726.3564   | 4877.8526   | 5024.5278   | 5130.9534   | 5235.7462   | 5347.7450   | 5439.7227   |
| 95%   | 9591.0690   | 11050.0217  | 12099.8946  | 12927.7166  | 13694.3258  | 14425.7601  | 14995.7868  | 15465.9404  | 15907.7271  | 16305.5025  |
| 97.5% | 20239.4683  | 24300.1300  | 27473.9893  | 30280.9067  | 32661.2134  | 34784.9992  | 37009.4963  | 38895.4258  | 40538.1559  | 42084.2065  |
| 99%   | 47437.2126  | 59116.6141  | 71049.2025  | 80045.6962  | 87940.3141  | 94246.2592  | 99744.4258  | 105890.1351 | 110930.4106 | 115862.1288 |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 5526.0393   | 5586.0861   | 5668.1416   | 5734.4638   | 5787.4453   | 5834.0162   | 5872.5110   | 5921.2941   | 5962.8058   | 6002.5165   |
| 95%   | 16720.9681  | 17103.6059  | 17474.4475  | 17889.9980  | 18243.4996  | 18571.7212  | 18881.0772  | 19218.4500  | 19511.0001  | 19748.5693  |
| 97.5% | 43896.0495  | 45211.8843  | 46603.7393  | 47931.0301  | 49241.3083  | 50616.3042  | 51753.3402  | 52804.3315  | 54426.2022  | 55601.9932  |
| 99%   | 120887.0862 | 126041.4833 | 132028.4361 | 137819.6081 | 144415.8029 | 150889.9740 | 156459.6440 | 160527.9844 | 164799.6835 | 168380.2730 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 6039.1038   | 6078.3156   | 6103.0401   | 6121.3013   | 6140.8210   | 6174.0548   | 6212.6394   | 6226.5713   | 6252.0060   | 6270.9098   |
| 95%   | 19941.2601  | 20144.6493  | 20367.9574  | 20593.6997  | 20720.2334  | 20901.0092  | 21153.3721  | 21393.7682  | 21518.6128  | 21750.7358  |
| 97.5% | 56442.4659  | 57293.5309  | 58711.4347  | 59798.0895  | 61022.8693  | 61630.7277  | 62499.0928  | 63589.8438  | 64438.2178  | 66051.2736  |
| 99%   | 172711.2177 | 176753.6460 | 181595.0274 | 185977.0498 | 190550.0182 | 196063.2284 | 201581.4510 | 207298.3859 | 212867.9527 | 218879.1791 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 6307.8180   | 6334.3005   | 6355.4095   | 6386.2954   | 6414.6980   | 6429.3394   | 6447.7089   | 6463.4076   | 6475.7079   | 6490.4919   |
| 95%   | 22051.4783  | 22346.0372  | 22527.7369  | 22745.9785  | 22942.9752  | 23082.6760  | 23275.3937  | 23470.7753  | 23639.4927  | 23822.2617  |
| 97.5% | 67297.8503  | 68314.6135  | 69231.3227  | 70394.2647  | 71598.8188  | 73163.0524  | 73986.9378  | 75292.9981  | 76025.8281  | 76683.9567  |
| 99%   | 223533.0041 | 229679.6113 | 236646.7639 | 244661.1176 | 251149.2738 | 260720.4589 | 265851.5132 | 273675.4129 | 279499.4751 | 287541.5301 |

Table 79: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and linear trend and 3 regressors for the Quadratic Spectral kernel.

|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 9.7435      | 19.2876     | 45.7839     | 127.4680    | 363.4456    | 892.0684    | 1789.7894   | 3019.0421   | 4274.6496   | 5375.6126   |
| 95%   | 12.4248     | 25.4734     | 64.3268     | 189.2053    | 572.7412    | 1511.2545   | 3306.5448   | 5900.0354   | 9027.7858   | 12042.8882  |
| 97.5% | 15.2480     | 32.2946     | 85.1564     | 273.4686    | 865.6544    | 2387.8068   | 5537.9508   | 10565.9778  | 16920.4746  | 23654.7120  |
| 99%   | 19.0266     | 42.0467     | 122.9608    | 412.1793    | 1422.0756   | 4121.7413   | 10033.5661  | 20090.1496  | 34457.1925  | 52599.1738  |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 6250.3172   | 6888.7945   | 7359.1636   | 7683.9966   | 7979.5209   | 8233.7309   | 8443.1209   | 8640.6063   | 8852.2491   | 9006.8320   |
| 95%   | 14730.3708  | 16901.7830  | 18711.4608  | 19992.9756  | 21165.9391  | 22130.6683  | 23076.0282  | 24023.8660  | 24867.4149  | 25627.5564  |
| 97.5% | 30227.6412  | 36610.6932  | 41241.1832  | 45378.3536  | 49373.2875  | 52703.2540  | 55897.7653  | 58316.7857  | 60965.0499  | 63552.7650  |
| 99%   | 69809.9456  | 87756.8941  | 103202.7018 | 118139.1445 | 128758.5569 | 138073.8941 | 147255.8794 | 156861.7453 | 165029.6106 | 175726.7149 |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 9134.0309   | 9285.1279   | 9418.6018   | 9512.4229   | 9595.8283   | 9672.8341   | 9727.3302   | 9798.6982   | 9881.1032   | 9935.0313   |
| 95%   | 26443.7160  | 27206.6444  | 27838.8778  | 28519.5445  | 29128.4392  | 29771.3489  | 30356.5240  | 30995.4426  | 31398.0410  | 31590.9429  |
| 97.5% | 65623.2200  | 68135.5231  | 70067.6917  | 72370.7460  | 74805.1859  | 76606.7644  | 78721.9647  | 80448.9262  | 81865.9611  | 83766.7141  |
| 99%   | 185064.8646 | 194420.2164 | 202644.9121 | 209894.7221 | 218761.1187 | 226592.5304 | 236121.3316 | 241331.7706 | 249134.7389 | 256497.4433 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 10001.0544  | 10076.0902  | 10136.8202  | 10190.5354  | 10202.9506  | 10286.1411  | 10322.4952  | 10368.4090  | 10404.7857  | 10443.8034  |
| 95%   | 31803.6451  | 32133.9917  | 32497.2857  | 32895.0663  | 33368.1931  | 33802.5284  | 34291.1918  | 34527.1092  | 34849.2193  | 35280.1093  |
| 97.5% | 85094.8942  | 87618.8747  | 89233.1406  | 91035.2306  | 93277.2986  | 95647.4780  | 97705.2381  | 100239.6575 | 101999.9627 | 104151.2998 |
| 99%   | 262904.5201 | 268900.9590 | 275568.5764 | 283129.3425 | 289117.2295 | 294618.3280 | 298638.4771 | 306598.8575 | 318198.4658 | 326388.0826 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 10498.8051  | 10523.1536  | 10547.9623  | 10559.5865  | 10592.2390  | 10605.0842  | 10632.6213  | 10650.1497  | 10671.0139  | 10680.6225  |
| 95%   | 35566.2775  | 35934.4174  | 36319.2884  | 36759.4845  | 37107.3831  | 37293.5365  | 37528.5276  | 37781.5886  | 38088.4117  | 38327.4169  |
| 97.5% | 105545.1516 | 107534.4442 | 109462.1412 | 111480.0253 | 113825.2230 | 115763.5226 | 117733.2123 | 118808.9005 | 120477.3850 | 122226.5900 |
| 99%   | 333844.1428 | 345092.8017 | 354223.5073 | 368765.5397 | 378560.3695 | 393098.9045 | 404426.3249 | 417870.4363 | 430751.9454 | 444461.6461 |

Table 80: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and linear trend and 3 regressors for the Quadratic Spectral kernel.

|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 4.6708      | 11.0225     | 33.5076     | 113.8194    | 330.3741    | 719.5349    | 1195.6899   | 1623.4440   | 1942.3045   | 2153.6062   |
| 95%   | 6.7633      | 16.5071     | 52.5710     | 191.4396    | 600.5458    | 1431.0574   | 2662.5387   | 3972.2018   | 5133.6841   | 5977.0262   |
| 97.5% | 8.9650      | 22.8076     | 77.2165     | 296.8744    | 989.1034    | 2590.9656   | 5161.4221   | 8378.1543   | 11519.4156  | 14146.5187  |
| 99%   | 12.2179     | 32.8823     | 118.0313    | 496.0197    | 1818.7406   | 5031.4249   | 10662.9759  | 18461.1118  | 27563.5968  | 36369.1715  |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 2290.1667   | 2380.9607   | 2462.8258   | 2533.1129   | 2586.8676   | 2625.5291   | 2666.5818   | 2707.6525   | 2750.6723   | 2781.9134   |
| 95%   | 6585.6081   | 7058.1450   | 7444.7552   | 7772.1735   | 8045.9636   | 8341.2587   | 8581.4726   | 8788.8609   | 9016.1170   | 9176.7208   |
| 97.5% | 16189.3143  | 17978.8507  | 19342.6474  | 20715.8912  | 21650.6524  | 22854.1044  | 24016.2839  | 25072.9979  | 25924.8331  | 26785.1961  |
| 99%   | 44919.8002  | 52135.1340  | 57372.2220  | 62164.5297  | 66506.0264  | 71596.9225  | 75583.6945  | 80117.0448  | 84174.1591  | 87354.3334  |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 2810.5897   | 2836.7458   | 2860.6893   | 2879.6844   | 2898.4371   | 2916.8601   | 2932.9182   | 2945.9108   | 2953.7115   | 2965.2319   |
| 95%   | 9422.0905   | 9585.0473   | 9779.5474   | 9911.0453   | 10025.9357  | 10123.3494  | 10264.0308  | 10370.4563  | 10465.2293  | 10534.3550  |
| 97.5% | 27420.2418  | 28068.3532  | 28911.2614  | 29592.4243  | 30338.7341  | 30977.0620  | 31680.6018  | 32264.6180  | 33008.1431  | 33743.4335  |
| 99%   | 91694.3454  | 94012.3780  | 98070.0504  | 100676.9150 | 104513.7564 | 107037.1051 | 110912.1537 | 114706.4508 | 118323.0094 | 120562.2078 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 2979.8431   | 2994.1124   | 3001.2263   | 3005.2239   | 3013.0473   | 3031.1871   | 3039.4885   | 3051.6461   | 3062.5372   | 3072.9818   |
| 95%   | 10611.1739  | 10700.8079  | 10768.9837  | 10839.2153  | 10924.5874  | 10987.0443  | 11044.2634  | 11110.8806  | 11214.3144  | 11323.3602  |
| 97.5% | 34318.6508  | 34918.2919  | 35589.9703  | 35928.4325  | 36711.7747  | 37244.4827  | 37861.4394  | 38430.7933  | 38848.7086  | 39370.9833  |
| 99%   | 123785.4379 | 127036.1206 | 129631.0984 | 132204.7181 | 133420.1292 | 137594.6713 | 139593.1804 | 144483.5099 | 148552.4346 | 150876.7638 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 3084.1278   | 3091.9766   | 3102.0684   | 3103.7621   | 3108.1132   | 3110.8131   | 3113.6428   | 3116.2443   | 3121.9640   | 3126.0664   |
| 95%   | 11392.4521  | 11465.0023  | 11557.2219  | 11630.3088  | 11758.8802  | 11866.0173  | 11911.4901  | 11956.8076  | 12028.8480  | 12057.8128  |
| 97.5% | 39951.3767  | 40549.7649  | 41219.5794  | 41577.8269  | 42241.5270  | 42780.7338  | 43189.3853  | 43646.0938  | 43977.4148  | 44355.3531  |
| 99%   | 155616.8834 | 160022.4328 | 165455.4507 | 169180.1521 | 172746.5210 | 177737.9383 | 179911.8408 | 183078.8529 | 186927.1088 | 189988.6469 |

Table 81: Fixed-b critical values for Wald test for 1 hypotheses in regression with intercept and linear trend and 4 regressors for the Quadratic Spectral kernel.

|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 8.1197      | 19.5765     | 61.9433     | 219.7041    | 669.9417    | 1541.4492   | 2668.6038   | 3767.8873   | 4628.5242   | 5204.9284   |
| 95%   | 10.7979     | 27.3173     | 92.2664     | 351.4399    | 1144.6884   | 2866.8671   | 5394.0601   | 8347.6369   | 11034.9677  | 13238.6723  |
| 97.5% | 13.6906     | 36.1159     | 126.5151    | 518.1762    | 1828.8053   | 4817.8253   | 9780.7506   | 16273.9644  | 23087.9531  | 29277.6780  |
| 99%   | 17.6116     | 48.6013     | 184.3248    | 829.6218    | 3123.1198   | 8796.2569   | 19218.8196  | 34395.9817  | 53597.2581  | 70616.9636  |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 5595.0274   | 5904.2649   | 6104.2135   | 6284.6104   | 6450.8413   | 6573.9718   | 6701.3167   | 6777.3311   | 6866.8138   | 6961.2181   |
| 95%   | 14861.9446  | 16129.0026  | 17182.7254  | 18164.8250  | 18905.8759  | 19521.0127  | 20158.3929  | 20766.1779  | 21333.8606  | 21852.6067  |
| 97.5% | 34337.0644  | 38541.1229  | 41818.6914  | 44755.6723  | 47491.2361  | 49937.0348  | 52853.9712  | 54931.7903  | 57146.0154  | 59831.7429  |
| 99%   | 88337.1176  | 103238.0606 | 116654.6221 | 127564.6810 | 136939.3733 | 146151.8553 | 156560.5303 | 163549.8835 | 170822.1385 | 179296.5019 |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 7027.4253   | 7107.1038   | 7176.9234   | 7227.5599   | 7274.1089   | 7325.2600   | 7380.1326   | 7433.6028   | 7452.9605   | 7490.6249   |
| 95%   | 22361.0782  | 22839.9073  | 23252.8105  | 23743.9581  | 24232.1646  | 24669.0313  | 24957.4384  | 25267.9465  | 25450.1855  | 25706.5283  |
| 97.5% | 62090.5379  | 63797.5555  | 65414.1207  | 67560.6389  | 69431.8484  | 71247.6710  | 73086.6738  | 74461.5205  | 76135.5944  | 77882.3152  |
| 99%   | 185868.6105 | 191161.1473 | 199640.4604 | 205433.0817 | 213750.8854 | 221549.9646 | 228684.9718 | 235787.0969 | 243069.9608 | 249814.1815 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 7529.3816   | 7554.0951   | 7579.2179   | 7591.9445   | 7612.7057   | 7623.5347   | 7646.8122   | 7673.3765   | 7698.6154   | 7717.4179   |
| 95%   | 25960.8628  | 26327.3599  | 26675.7384  | 26904.3145  | 27274.7119  | 27470.9894  | 27647.0920  | 27882.4786  | 28061.2401  | 28302.5563  |
| 97.5% | 79854.7190  | 80642.3146  | 81678.7629  | 82401.7381  | 84239.0746  | 85521.1645  | 86473.3508  | 87904.5100  | 89104.1236  | 90824.3946  |
| 99%   | 255837.5417 | 261307.8968 | 267095.8151 | 273131.0117 | 280806.0368 | 288069.3789 | 298714.5993 | 307578.7224 | 316813.1443 | 324127.2783 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 7723.4235   | 7751.3536   | 7766.4031   | 7784.8443   | 7799.4240   | 7810.1748   | 7822.3103   | 7832.9094   | 7842.1074   | 7858.4737   |
| 95%   | 28525.6760  | 28743.5325  | 28965.2984  | 29221.6595  | 29439.4827  | 29605.3656  | 29733.8886  | 29896.1287  | 30118.2250  | 30389.1455  |
| 97.5% | 92312.3130  | 93628.4955  | 95850.5605  | 98017.3680  | 99474.9727  | 100732.7431 | 102054.7968 | 103489.6071 | 104672.3589 | 105908.5274 |
| 99%   | 333842.4071 | 343350.1917 | 350706.2934 | 361543.7409 | 374020.9199 | 379477.6662 | 388064.9078 | 395826.9977 | 402615.5976 | 409408.6574 |

Table 82: Fixed-b critical values for Wald test for 2 hypotheses in regression with intercept and linear trend and 4 regressors for the Quadratic Spectral kernel.

|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 11.0234     | 26.9853     | 87.1423     | 317.4595    | 995.3948    | 2324.6767   | 4160.0000   | 5972.8374   | 7361.9472   | 8298.2429   |
| 95%   | 14.1812     | 36.4868     | 125.5910    | 490.4874    | 1641.0776   | 4180.5006   | 8214.1137   | 12926.6113  | 17315.6981  | 20659.0005  |
| 97.5% | 17.3326     | 46.7415     | 170.8379    | 717.4436    | 2547.0906   | 6891.8082   | 14434.0286  | 24068.2794  | 34718.4465  | 43922.8492  |
| 99%   | 21.8793     | 61.6516     | 247.4193    | 1099.3326   | 4245.0372   | 12272.4814  | 26868.2523  | 49803.8185  | 80350.5551  | 107379.2105 |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 8939.0209   | 9431.2118   | 9809.0696   | 10136.8148  | 10447.4884  | 10639.0883  | 10807.6201  | 11006.2147  | 11183.6754  | 11347.0571  |
| 95%   | 23349.3413  | 25358.4276  | 27245.3997  | 28715.4649  | 29943.5098  | 31165.1350  | 32371.1674  | 33421.2296  | 34574.5064  | 35349.9773  |
| 97.5% | 52147.7276  | 58594.5300  | 64064.7026  | 68660.9944  | 73377.1100  | 77328.2481  | 81434.7443  | 85251.1717  | 88570.8739  | 91963.9701  |
| 99%   | 133553.4247 | 158482.5383 | 177000.0818 | 194280.0723 | 213512.5989 | 230296.9044 | 244981.8398 | 261592.9529 | 275197.0535 | 285219.7382 |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 11496.2864  | 11619.9106  | 11748.3446  | 11816.6660  | 11892.3292  | 11990.5990  | 12037.9757  | 12096.5809  | 12140.5324  | 12202.2629  |
| 95%   | 36022.6282  | 36858.9124  | 37465.7830  | 38283.1671  | 39023.2238  | 39598.8428  | 40228.3107  | 40707.9084  | 41354.1265  | 41755.1076  |
| 97.5% | 95390.1286  | 99129.6687  | 102087.6157 | 105900.9215 | 109111.6772 | 112685.1658 | 115372.2299 | 118803.2147 | 121891.1298 | 123570.6706 |
| 99%   | 295638.0176 | 308508.4320 | 318503.9824 | 330812.3372 | 341327.6079 | 354485.2044 | 364380.6802 | 376338.1727 | 386380.6285 | 396601.5022 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 12261.1176  | 12320.6180  | 12373.0098  | 12410.1861  | 12463.6959  | 12523.2105  | 12568.0533  | 12611.6381  | 12631.4112  | 12659.6462  |
| 95%   | 42229.9341  | 42624.5118  | 43128.3836  | 43370.7035  | 43651.7417  | 43986.6517  | 44437.1037  | 44877.4101  | 45005.2873  | 45263.4087  |
| 97.5% | 125556.2397 | 127433.4585 | 130210.6829 | 132660.4505 | 134830.5469 | 137421.0369 | 140863.2206 | 143488.0285 | 145859.2270 | 149127.5085 |
| 99%   | 408900.5473 | 417390.5359 | 430055.7530 | 442401.0715 | 452816.2556 | 465568.9424 | 479091.1684 | 487115.7911 | 505236.4560 | 520478.0545 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 12691.5837  | 12726.3972  | 12748.9852  | 12762.2476  | 12785.5577  | 12801.2100  | 12824.1958  | 12856.1231  | 12863.1204  | 12869.9395  |
| 95%   | 45452.7092  | 45801.8709  | 46112.1090  | 46430.3747  | 46672.9987  | 46970.6404  | 47205.9687  | 47435.9635  | 47676.8693  | 47955.4196  |
| 97.5% | 151597.8416 | 153923.7497 | 156550.2687 | 160330.9064 | 162603.0915 | 164565.1987 | 166797.1186 | 169079.8543 | 171730.7248 | 174877.0519 |
| 99%   | 535346.2624 | 551850.0099 | 564723.2670 | 582832.5679 | 600671.3483 | 620706.6538 | 633526.2218 | 651871.5346 | 661861.5036 | 673176.3711 |

Table 83: Fixed-b critical values for Wald test for 3 hypotheses in regression with intercept and linear trend and 4 regressors for the Quadratic Spectral kernel.

|       | 0.02        | 0.04        | 0.06        | 0.08        | 0.10        | 0.12        | 0.14        | 0.16        | 0.18        | 0.20        |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 90%   | 13.8550     | 34.4377     | 112.6643    | 418.0912    | 1323.0278   | 3165.2868   | 5659.1771   | 8254.0382   | 10233.9546  | 11597.2229  |
| 95%   | 17.4932     | 45.4007     | 158.7349    | 626.2817    | 2170.9349   | 5527.8655   | 10987.6575  | 17318.1883  | 23531.9796  | 28712.4965  |
| 97.5% | 21.0705     | 56.9676     | 214.3977    | 895.8520    | 3270.6653   | 9066.3977   | 19311.4375  | 33168.1787  | 48631.3981  | 62007.2115  |
| 99%   | 25.7628     | 74.8295     | 304.3445    | 1384.6001   | 5328.5617   | 15812.1196  | 35645.6016  | 66117.7701  | 104772.4710 | 146301.0951 |
|       | 0.22        | 0.24        | 0.26        | 0.28        | 0.30        | 0.32        | 0.34        | 0.36        | 0.38        | 0.40        |
| 90%   | 12478.8252  | 13233.1867  | 13761.8467  | 14229.2817  | 14590.2598  | 14935.0240  | 15271.8849  | 15547.7676  | 15783.3886  | 16009.4308  |
| 95%   | 32349.0458  | 35242.8307  | 37565.3979  | 39813.7532  | 41728.0935  | 43559.9880  | 45311.7734  | 46769.7983  | 48373.8707  | 49803.5246  |
| 97.5% | 73168.4731  | 82951.6388  | 90401.5109  | 97083.6189  | 102823.9616 | 108900.6299 | 115081.1944 | 119648.9611 | 124971.7363 | 130806.4853 |
| 99%   | 184581.9310 | 216129.1649 | 242570.0346 | 264755.9875 | 283820.7084 | 303170.9169 | 325426.2523 | 342264.5976 | 358247.3788 | 373449.6614 |
|       | 0.42        | 0.44        | 0.46        | 0.48        | 0.50        | 0.52        | 0.54        | 0.56        | 0.58        | 0.60        |
| 90%   | 16135.6942  | 16302.9272  | 16521.7185  | 16648.9702  | 16787.9974  | 16942.1522  | 17018.2508  | 17111.6266  | 17199.8488  | 17284.0433  |
| 95%   | 50946.1774  | 52145.8546  | 53210.2685  | 54342.6174  | 55282.4357  | 56222.6184  | 57397.2373  | 58159.8546  | 58889.6218  | 59940.3152  |
| 97.5% | 134972.7717 | 140036.7191 | 144751.5738 | 150324.3241 | 154497.8300 | 159310.4787 | 163549.0513 | 167703.5567 | 171824.0354 | 175521.1404 |
| 99%   | 388353.3335 | 404753.2340 | 421878.8544 | 446191.2084 | 461747.6324 | 477741.7581 | 499437.2273 | 513360.1350 | 532089.3462 | 549686.9003 |
|       | 0.62        | 0.64        | 0.66        | 0.68        | 0.70        | 0.72        | 0.74        | 0.76        | 0.78        | 0.80        |
| 90%   | 17328.6882  | 17332.0808  | 17391.5106  | 17466.7953  | 17529.8320  | 17545.7698  | 17608.9524  | 17691.5615  | 17701.3667  | 17779.5975  |
| 95%   | 60449.3731  | 61200.0372  | 61743.5143  | 62573.6511  | 63527.5068  | 63895.3835  | 64094.9883  | 64803.5409  | 65412.8633  | 66238.3290  |
| 97.5% | 179628.1623 | 183973.1447 | 187879.0989 | 191779.7317 | 194290.6607 | 196857.2690 | 199314.7158 | 202711.1434 | 207818.0835 | 210724.4734 |
| 99%   | 565423.9685 | 578748.8334 | 594445.4685 | 606822.2810 | 623149.5367 | 638142.7869 | 657814.1174 | 675128.8129 | 692290.7024 | 704194.3912 |
|       | 0.82        | 0.84        | 0.86        | 0.88        | 0.90        | 0.92        | 0.94        | 0.96        | 0.98        | 1.00        |
| 90%   | 17833.5369  | 17910.5070  | 17933.4863  | 17944.9228  | 17968.9934  | 18013.7308  | 18042.3478  | 18068.8213  | 18084.1284  | 18092.2305  |
| 95%   | 66516.6353  | 67015.0696  | 67489.2097  | 67688.5914  | 68237.7700  | 68596.6417  | 68990.3576  | 69319.0741  | 69648.7491  | 69918.3243  |
| 97.5% | 213144.1006 | 216735.0957 | 220841.2010 | 223129.1073 | 226881.0259 | 230525.2103 | 233821.6083 | 237619.7434 | 240244.3366 | 243234.0206 |
| 99%   | 732072.6691 | 761804.8936 | 783175.1161 | 802229.6191 | 820513.5457 | 834275.9074 | 859221.6195 | 880071.9995 | 904706.1999 | 926697.7557 |

Table 84: Fixed-b critical values for Wald test for 4 hypotheses in regression with intercept and linear trend and 4 regressors for the Quadratic Spectral kernel.