

**Strategic similarity and firm performance: Multiple replications of  
Deephouse (1999)**

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**Table A.1 Results of WLS Estimation**

|                                            | Deephouse<br>(1999)  | Aggreg<br>ation       | Ind1        | Ind2         | Ind3         | Ind4          | Ind5        | Ind6         | Ind7         | Ind8          | Ind9         | Ind10       | Ind11       | Ind12       | Ind13       | Ind14       | Ind15       |
|--------------------------------------------|----------------------|-----------------------|-------------|--------------|--------------|---------------|-------------|--------------|--------------|---------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Strategic<br/>Deviation<sup>2</sup></b> | -0.009***<br>(-6.00) | -0.003***<br>(-15.08) | -0.004      | -0.021*      | 0.005        | -0.040***     | 0.028       | -0.030*      | -0.014       | -0.020        | -0.030       | -0.014      | -0.031      | -0.008      | -0.048      | -0.011      | -0.012      |
| <b>Strategic<br/>Deviation</b>             | 0.243***<br>(-10.00) | 0.036***<br>(14.88)   | 0.001       | 0.041        | -0.025       | 0.066         | -0.015      | 0.055        | 0.045        | 0.029         | 0.027        | 0.021       | 0.041       | 0.007       | 0.051       | 0.028       | 0.065       |
| <b>R<sup>2</sup></b>                       | —                    | 0.407***              | 0.471       | 0.9056       | 0.338        | 0.376         | 0.179       | 0.397        | 0.378        | 0.071         | 0.007        | 0.623       | 0.284       | 0.249       | 0.482       | 0.204       | 0.349       |
| <b>uTest (∪ or ∩)</b>                      |                      | ∩***<br>(14.70)       | ∩<br>(0.14) | ∩*<br>(1.99) | ∪<br>(0.87)  | ∩**<br>(2.46) | ∪<br>(0.36) | ∩*<br>(2.14) | ∩*<br>(1.79) | ∩<br>(1.50)   | ∩<br>(1.18)  | ∩<br>(0.69) | ∩<br>(0.70) | ∩<br>(0.25) | ∩<br>(1.51) | ∩<br>(0.50) | ∩<br>(0.64) |
| <b>Relationship</b>                        |                      | ∩                     | n.s.        | ∩            | n.s.         | ∩             | n.s.        | ∩            | ∩            | n.s.          | n.s.         | n.s.        | n.s.        | n.s.        | n.s.        | n.s.        | n.s.        |
| <b>N</b>                                   | 960                  | 226946                | 782         | 1866         | 2556         | 1030          | 192         | 1785         | 1718         | 1623          | 839          | 810         | 351         | 633         | 470         | 744         | 638         |
|                                            | Ind16                | Ind17                 | Ind18       | Ind19        | Ind20        | Ind21         | Ind22       | Ind23        | Ind24        | Ind25         | Ind26        | Ind27       | Ind28       | Ind29       | Ind30       | Ind31       | Ind32       |
| <b>Strategic<br/>Deviation<sup>2</sup></b> | -0.021               | -0.018                | -0.021      | -0.023       | -0.009*      | -0.010        | -0.034      | -0.011       | -0.011*      | -0.011*       | -0.007*      | -0.000      | -0.010      | -0.018      | -0.007      | -0.037      | -0.017      |
| <b>Strategic<br/>Deviation</b>             | 0.055                | 0.057                 | 0.040       | 0.052        | 0.018        | 0.033         | 0.047       | 0.040        | 0.050**      | 0.037*        | 0.021        | 0.023       | 0.100       | 0.055       | 0.033*      | 0.071       | 0.071       |
| <b>R<sup>2</sup></b>                       | 0.180                | 0.544                 | 0.559       | 0.364        | 0.378        | 0.642         | 0.048       | 0.259        | 0.440        | 0.359         | 0.286        | 0.408       | 0.158       | 0.594       | 0.352       | 0.193       | 0.282       |
| <b>uTest (∪ or ∩)</b>                      | ∩<br>(1.28)          | ∩<br>(1.39)           | ∩<br>(1.13) | ∩<br>(0.69)  | ∩*<br>(2.25) | ∩<br>(1.09)   | ∩<br>(0.99) | ∩<br>(1.28)  | ∩*<br>(1.82) | ∩**<br>(2.35) | ∩*<br>(2.14) | N/A         | ∩<br>(0.06) | ∩<br>(1.49) | ∩<br>(1.63) | ∩<br>(1.02) | ∩<br>(1.21) |
| <b>Relationship</b>                        | n.s.                 | n.s.                  | n.s.        | n.s.         | ∩            | n.s.          | n.s.        | n.s.         | ∩            | ∩             | ∩            | n.s.        | n.s.        | n.s.        | +           | n.s.        | n.s.        |
| <b>N</b>                                   | 809                  | 1409                  | 687         | 421          | 10859        | 1150          | 296         | 2309         | 3554         | 6303          | 12536        | 542         | 229         | 799         | 6143        | 248         | 376         |

*t* statistics in parentheses with \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , two-tailed test.

n.s. means not significant.

N/A means that the turning point is not in the range of strategic deviation.

**Table A.1-continued Results of WLS Estimation**

|                                        | Ind33    | Ind34  | Ind35  | Ind36  | Ind37  | Ind38  | Ind39    | Ind40     | Ind41   | Ind42  | Ind43  | Ind44  | Ind45  | Ind46  | Ind47   | Ind48  | Ind49   |
|----------------------------------------|----------|--------|--------|--------|--------|--------|----------|-----------|---------|--------|--------|--------|--------|--------|---------|--------|---------|
| <b>Strategic Deviation<sup>2</sup></b> | -0.019** | -0.013 | 0.001  | -0.014 | -0.019 | 0.036  | -0.019** | -0.028*** | -0.015* | -0.070 | -0.005 | -0.011 | -0.016 | -0.009 | -0.145  | -0.004 | -0.037* |
| <b>Strategic Deviation</b>             | 0.037    | 0.013  | 0.002  | 0.045  | 0.075  | -0.099 | 0.063*** | 0.067***  | 0.036   | 0.192  | 0.015  | 0.041  | 0.086  | 0.004  | 0.339   | 0.018  | 0.108*  |
| <b>R<sup>2</sup></b>                   | 0.016    | 0.204  | 0.302  | 0.483  | 0.276  | 0.422  | 0.403    | 0.419     | 0.371   | 0.369  | 0.366  | 0.350  | 0.462  | 0.418  | 0.121   | 0.419  | 0.263   |
| <b>uTest (U or ∩)</b>                  | ∩*       | ∩      | U      | ∩*     | ∩*     | U      | ∩**      | ∩***      | ∩*      | ∩      | ∩      | ∩      | ∩      | ∩      | ∩       | ∩      | ∩**     |
|                                        | (2.12)   | (0.66) | (0.01) | (1.67) | (1.75) | (1.04) | (2.96)   | (3.89)    | (2.26)  | (0.53) | (0.37) | (1.02) | (0.76) | (0.65) | (1.77)  | (0.32) | (2.38)  |
| <b>Relationship</b>                    | ∩        | n.s.   | n.s.   | ∩      | ∩      | n.s.   | ∩        | ∩         | ∩       | n.s.   | n.s.   | n.s.   | n.s.   | n.s.   | n.s.    | n.s.   | ∩       |
| <b>N</b>                               | 2290     | 935    | 595    | 1892   | 880    | 158    | 3457     | 3948      | 3754    | 75     | 933    | 1012   | 220    | 1817   | 55      | 648    | 481     |
|                                        | Ind50    | Ind51  | Ind52  | Ind53  | Ind54  | Ind55  | Ind56    | Ind57     | Ind58   | Ind59  | Ind60  | Ind61  | Ind62  | Ind63  | Ind64   | Ind65  | Ind66   |
| <b>Strategic Deviation<sup>2</sup></b> | -0.012*  | -0.018 | -0.013 | -0.010 | -0.019 | 0.002  | -0.007   | -0.020    | -0.027  | -0.034 | -0.014 | -0.026 | -0.039 | -0.013 | -0.097* | 0.007  | -0.015  |
| <b>Strategic Deviation</b>             | 0.030    | 0.044  | 0.024  | 0.028  | 0.047  | -0.018 | 0.020    | 0.052     | 0.072   | -0.021 | 0.041  | 0.161  | -0.009 | 0.041  | 0.170   | -0.016 | 0.014   |
| <b>R<sup>2</sup></b>                   | 0.372    | 0.460  | 0.574  | 0.426  | 0.404  | 0.413  | 0.419    | 0.333     | 0.472   | 0.575  | 0.492  | 0.299  | 0.461  | 0.536  | 0.103   | 0.322  | 0.460   |
| <b>uTest (U or ∩)</b>                  | ∩*       | ∩*     | ∩      | ∩      | ∩      | U      | ∩        | ∩         | ∩       | ∩      | ∩      | ∩      | ∩      | ∩      | ∩*      | U      | ∩       |
|                                        | (2.00)   | (1.91) | (0.83) | (1.59) | (1.64) | (0.28) | (0.82)   | (1.67)    | (1.51)  | (0.38) | (0.66) | (0.91) | (0.40) | (0.47) | (2.62)  | (0.64) | (0.86)  |
| <b>Relationship</b>                    | ∩        | ∩      | n.s.   | n.s.   | n.s.   | n.s.   | n.s.     | n.s.      | n.s.    | n.s.   | n.s.   | n.s.   | n.s.   | n.s.   | ∩       | n.s.   | n.s.    |
| <b>N</b>                               | 3770     | 1612   | 673    | 3100   | 1349   | 4503   | 1226     | 824       | 706     | 148    | 763    | 180    | 163    | 248    | 79      | 1026   | 341     |

*t* statistics in parentheses with \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , two-tailed test.

n.s. means not significant.

N/A means that the turning point is not in the range of strategic deviation.

Table A.1-continued Results of WLS Estimation

|                                        | Ind67   | Ind68    | Ind69  | Ind70   | Ind71   | Ind72  | Ind73     | Ind74    | Ind75  | Ind76  | Ind77     | Ind78    | Ind79  | Ind80   | Ind81  | Ind82  | Ind83  |
|----------------------------------------|---------|----------|--------|---------|---------|--------|-----------|----------|--------|--------|-----------|----------|--------|---------|--------|--------|--------|
| <b>Strategic Deviation<sup>2</sup></b> | -0.073* | -0.002   | -0.140 | 0.016   | -0.007  | -0.062 | -0.037*** | -0.028** | -0.016 | 0.014  | -0.045*** | -0.0336* | 0.000  | -0.021* | -0.007 | -0.006 | -0.007 |
| <b>Strategic Deviation</b>             | 0.092   | 0.016    | 0.209  | 0.029   | 0.010   | 0.102  | 0.113**   | 0.094**  | 0.074* | -0.017 | 0.116**   | 0.052    | 0.004  | 0.041   | 0.041  | 0.040* | 0.020  |
| <b>R<sup>2</sup></b>                   | 0.514   | 0.365    | 0.214  | 0.194   | 0.510   | 0.308  | 0.393     | 0.462    | 0.457  | 0.589  | 0.460     | 0.394    | 0.459  | 0.398   | 0.327  | 0.473  | 0.555  |
| <b>uTest (U or ∩)</b>                  | ∩*      | ∩        | ∩      | ∪       | ∩       | ∩      | ∩***      | ∩**      | ∩      | ∪      | ∩***      | ∩*       | N/A    | ∩*      | ∩      | ∩      | ∩      |
|                                        | (2.22)  | (0.09)   | (0.44) | (0.08)  | (0.45)  | (1.31) | (3.24)    | (2.67)   | (1.47) | (0.86) | (3.35)    | (2.00)   |        | (2.09)  | (0.36) | (0.99) | (0.91) |
| <b>Relationship</b>                    | ∩       | n.s.     | n.s.   | n.s.    | n.s.    | n.s.   | ∩         | ∩        | +      | n.s.   | ∩         | ∩        | n.s.   | ∩       | ∩      | +      | n.s.   |
| <b>N</b>                               | 489     | 570      | 45     | 176     | 797     | 248    | 1263      | 1635     | 1384   | 778    | 528       | 1250     | 1296   | 2058    | 1284   | 5496   | 1885   |
|                                        | Ind84   | Ind85    | Ind86  | Ind87   | Ind88   | Ind89  | Ind90     | Ind91    | Ind92  | Ind93  | Ind94     | Ind95    | Ind96  | Ind97   | Ind98  | Ind99  | Ind100 |
| <b>Strategic Deviation<sup>2</sup></b> | -0.012  | -0.024** | -0.010 | -0.024* | -0.032* | -0.029 | -0.008    | -0.014*  | -0.015 | -0.015 | -0.262    | -0.019   | -0.005 | -0.004  | -0.011 | -0.011 | -0.008 |
| <b>Strategic Deviation</b>             | 0.030   | 0.064**  | 0.027  | 0.065*  | 0.094** | -0.014 | -0.029    | 0.032    | 0.026  | 0.032  | 0.575     | -0.003   | -0.009 | 0.024   | 0.030  | 0.030  | 0.005  |
| <b>R<sup>2</sup></b>                   | 0.434   | 0.395    | 0.363  | 0.619   | 0.553   | 0.240  | 0.343     | 0.262    | 0.198  | 0.301  | 0.246     | 0.019    | 0.676  | 0.116   | 0.416  | 0.389  | 0.352  |
| <b>uTest (U or ∩)</b>                  | ∩*      | ∩**      | ∩      | ∩**     | ∩**     | ∩      | N/A       | ∩*       | ∩      | ∩      | ∩         | ∩        | ∩      | ∩       | ∩      | ∩      | ∩      |
|                                        | (1.76)  | (2.65)   | (1.07) | (2.50)  | (2.43)  | (0.52) |           | (2.01)   | (0.62) | (0.95) | (0.56)    | (0.28)   | (0.03) | (0.50)  | (1.35) | (1.24) | (0.38) |
| <b>Relationship</b>                    | ∩       | ∩        | n.s.   | ∩       | ∩       | n.s.   | n.s.      | ∩        | n.s.   | n.s.   | n.s.      | n.s.     | n.s.   | n.s.    | n.s.   | n.s.   | n.s.   |
| <b>N</b>                               | 4523    | 2857     | 1823   | 1156    | 1192    | 361    | 110       | 3155     | 714    | 834    | 64        | 257      | 214    | 2300    | 2633   | 1759   | 1006   |

*t* statistics in parentheses with \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , two-tailed test.

n.s. means not significant.

N/A means that the turning point is not in the range of strategic deviation.

**Table A.1-continued Results of WLS Estimation**

|                                        | Ind101      | Ind102       | Ind103      | Ind104      | Ind105        | Ind106      | Ind107      | Ind108       | Ind109      | Ind110         | Ind111        | Ind112       | Ind113      | Ind114         | Ind115       | Ind116      | Ind117        |
|----------------------------------------|-------------|--------------|-------------|-------------|---------------|-------------|-------------|--------------|-------------|----------------|---------------|--------------|-------------|----------------|--------------|-------------|---------------|
| <b>Strategic Deviation<sup>2</sup></b> | -0.002      | -0.016*      | -0.016      | 0.009       | -0.020*       | -0.024      | -0.019      | -0.027*      | 0.004       | -0.021***      | -0.016**      | -0.013       | -0.011      | -0.013*        | -0.011       | -0.006      | -0.008        |
| <b>Strategic Deviation</b>             | 0.032       | 0.073**      | 0.051       | 0.027       | 0.067*        | 0.059       | 0.044       | 0.083**      | 0.001       | 0.077***       | 0.049*        | 0.045        | 0.037       | 0.038*         | 0.043        | -0.011      | 0.014         |
| <b>R<sup>2</sup></b>                   | 0.384       | 0.377        | 0.088       | 0.001       | 0.045         | 0.441       | 0.373       | 0.395        | 0.521       | 0.368          | 0.436         | 0.484        | 0.413       | 0.494          | 0.501        | 0.325       | 0.309         |
| <b>uTest (U or ∩)</b>                  | ∩<br>(0.03) | ∩*<br>(1.87) | ∩<br>(1.14) | ∪<br>(0.01) | ∩**<br>(2.40) | ∩<br>(1.45) | ∩<br>(1.18) | ∩*<br>(2.32) | ∩<br>(0.19) | ∩***<br>(3.17) | ∩**<br>(2.54) | ∩*<br>(1.86) | ∩<br>(1.37) | ∩*<br>(2.21)   | ∩<br>(1.10)  | ∩<br>(0.13) | ∩<br>(0.37)   |
| <b>Relationship</b>                    | n.s.        | ∩            | n.s.        | n.s.        | ∩             | n.s.        | n.s.        | ∩            | n.s.        | ∩              | ∩             | ∩            | n.s.        | ∩              | n.s.         | n.s.        | n.s.          |
| <b>N</b>                               | 877         | 2023         | 923         | 149         | 1790          | 846         | 933         | 1375         | 1081        | 3364           | 1941          | 2491         | 2195        | 3532           | 1270         | 1688        | 449           |
|                                        | Ind118      | Ind119       | Ind120      | Ind121      | Ind122        | Ind123      | Ind124      | Ind125       | Ind126      | Ind127         | Ind128        | Ind129       | Ind130      | Ind131         | Ind132       | Ind133      | Ind134        |
| <b>Strategic Deviation<sup>2</sup></b> | 0.013       | -0.014       | -0.040      | 0.002       | -0.015        | 0.007       | -0.021      | -0.007       | -0.008      | -0.019         | -0.010        | 0.052        | -0.013      | -0.019**       | -0.012       | -0.013      | -0.024**      |
| <b>Strategic Deviation</b>             | 0.035       | 0.033        | 0.116       | -0.026      | 0.026         | -0.012      | 0.041       | 0.017        | 0.011       | 0.052          | 0.048         | -0.049       | 0.0717*     | 0.059**        | 0.028        | 0.060       | 0.077**       |
| <b>R<sup>2</sup></b>                   | 0.114       | 0.467        | 0.495       | 0.173       | 0.416         | 0.380       | 0.313       | 0.397        | 0.434       | 0.469          | 0.003         | 0.358        | 0.473       | 0.439          | 0.494        | 0.326       | 0.256         |
| <b>uTest (U or ∩)</b>                  | ∪<br>(0.04) | ∩<br>(1.41)  | ∩<br>(0.99) | ∪<br>(0.06) | ∩<br>(1.30)   | ∪<br>(0.36) | ∩<br>(0.63) | ∩<br>(1.62)  | ∩<br>(0.72) | ∩<br>(1.44)    | ∩<br>(0.48)   | ∪<br>(0.63)  | ∩<br>(0.98) | ∩***<br>(3.17) | ∩*<br>(1.65) | ∩<br>(0.92) | ∩**<br>(2.90) |
| <b>Relationship</b>                    | n.s.        | n.s.         | n.s.        | n.s.        | n.s.          | n.s.        | n.s.        | n.s.         | n.s.        | n.s.           | n.s.          | n.s.         | +           | ∩              | ∩            | n.s.        | ∩             |
| <b>N</b>                               | 619         | 1140         | 209         | 573         | 498           | 616         | 220         | 6265         | 1692        | 948            | 434           | 53           | 1538        | 4048           | 3524         | 739         | 2240          |

*t* statistics in parentheses with \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , two-tailed test.

n.s. means not significant.

N/A means that the turning point is not in the range of strategic deviation.

**Table A.1-continued Results of WLS Estimation**

|                                        | Ind135      | Ind136      | Ind137      | Ind138        | Ind139      | Ind140      | Ind141      | Ind142      | Ind143      | Ind144      | Ind145      | Ind146      | Ind147 | Ind148 | Ind149       | Ind150      | Ind151      |
|----------------------------------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|--------|--------------|-------------|-------------|
| <b>Strategic Deviation<sup>2</sup></b> | -0.053      | -0.005      | -0.107      | -0.005        | 0.021       | -0.014      | -0.009      | -0.003      | -0.021      | 0.014       | -0.006      | -0.051      | -0.001 | 0.002  | -0.080*      | -0.008      | -0.010      |
| <b>Strategic Deviation</b>             | 0.119       | 0.007       | -0.050      | 0.011         | -0.060      | -0.012      | 0.018       | 0.006       | 0.104*      | -0.006      | -0.002      | 0.049       | 0.029  | 0.030  | 0.215**      | 0.017       | 0.036       |
| <b>R<sup>2</sup></b>                   | 0.506       | 0.241       | 0.212       | 0.330         | 0.192       | 0.360       | 0.510       | 0.387       | 0.174       | 0.151       | 0.534       | 0.461       | 0.074  | 0.340  | 0.260        | 0.342       | 0.220       |
| <b>uTest (U or ∩)</b>                  | ∩<br>(1.30) | ∩<br>(0.45) | ∩<br>(0.84) | ∩<br>(0.25)   | U<br>(0.46) | ∩<br>(0.32) | ∩<br>(0.76) | ∩<br>(0.38) | ∩<br>(1.45) | U<br>(0.31) | ∩<br>(0.29) | ∩<br>(0.76) | N/A    | N/A    | ∩*<br>(2.19) | ∩<br>(1.13) | ∩<br>(1.04) |
| <b>Relationship</b>                    | n.s.        | n.s.        | n.s.        | n.s.          | n.s.        | n.s.        | n.s.        | n.s.        | +           | n.s.        | n.s.        | n.s.        | n.s.   | n.s.   | ∩            | n.s.        | n.s.        |
| <b>N</b>                               | 268         | 2557        | 155         | 866           | 228         | 815         | 1070        | 3625        | 771         | 243         | 1249        | 158         | 450    | 733    | 381          | 4049        | 1390        |
|                                        | Ind152      | Ind153      | Ind154      | Ind155        |             |             |             |             |             |             |             |             |        |        |              |             |             |
| <b>Strategic Deviation<sup>2</sup></b> | -0.006      | -0.013      | -0.007      | -0.588*       |             |             |             |             |             |             |             |             |        |        |              |             |             |
| <b>Strategic Deviation</b>             | 0.024       | 0.056       | 0.022       | 0.770**       |             |             |             |             |             |             |             |             |        |        |              |             |             |
| <b>R<sup>2</sup></b>                   | 0.598       | 0.085       | 0.443       | 0.096         |             |             |             |             |             |             |             |             |        |        |              |             |             |
| <b>uTest (U or ∩)</b>                  | ∩<br>(0.22) | ∩<br>(0.02) | ∩<br>(0.40) | ∩**<br>(2.55) |             |             |             |             |             |             |             |             |        |        |              |             |             |
| <b>Relationship</b>                    | n.s.        | n.s.        | n.s.        | ∩             |             |             |             |             |             |             |             |             |        |        |              |             |             |
| <b>N</b>                               | 136         | 51          | 542         | 97            |             |             |             |             |             |             |             |             |        |        |              |             |             |

*t* statistics in parentheses with \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , two-tailed test.

n.s. means not significant.

N/A means that the turning point is not in the range of strategic deviation.

**Table A.2 Results of Dricoll & Kraay Estimation**

|                                            | Deephouse<br>(1999)  | Aggreg<br>ation      | Ind1         | Ind2           | Ind3           | Ind4           | Ind5         | Ind6           | Ind7           | Ind8           | Ind9        | Ind10        | Ind11         | Ind12         | Ind13          | Ind14         | Ind15          |
|--------------------------------------------|----------------------|----------------------|--------------|----------------|----------------|----------------|--------------|----------------|----------------|----------------|-------------|--------------|---------------|---------------|----------------|---------------|----------------|
| <b>Strategic<br/>Deviation<sup>2</sup></b> | -0.009***<br>(-6.00) | -0.002***<br>(-7.90) | -0.003       | -0.002         | -0.011***      | -0.020*        | -0.041       | -0.006***      | -0.018         | -0.019***      | 0.004*      | 0.010        | -0.045**      | -0.031***     | -0.016***      | -0.012*       | -0.045***      |
| <b>Strategic<br/>Deviation</b>             | 0.243***<br>(-10.00) | 0.022***<br>(5.82)   | -0.019       | 0.014          | 0.025*         | 0.015          | 0.097        | 0.010          | 0.035***       | 0.070***       | 0.009       | -0.092**     | 0.080         | 0.109         | 0.081**        | 0.003         | 0.201***       |
| <b>R<sup>2</sup></b>                       | —                    | 0.074***             | 0.129        | 0.071          | 0.124          | 0.071          | 0.586        | 0.096          | 0.084          | 0.099          | 0.146       | 0.180        | 0.193         | 0.170         | 0.169          | 0.119         | 0.080          |
| <b>uTest (∪ or ∩)</b>                      |                      | ∩***<br>(5.83)       |              | ∩<br>(0.57)    | ∩**<br>(2.79)  | ∩<br>(1.56)    | ∩<br>(1.43)  | ∩**<br>(2.34)  | ∩*<br>(1.74)   | ∩***<br>(3.59) | ∪<br>(0.08) | ∪<br>(1.35)  | ∩**<br>(2.44) | ∩**<br>(2.46) | ∩***<br>(3.82) | ∩<br>(0.70)   | ∩***<br>(4.64) |
| <b>Relationship</b>                        |                      | ∩                    | n.s.         | n.s.           | ∩              | n.s.           | n.s.         | ∩              | ∩              | ∩              | ✓           | -            | ∩             | ∩             | ∩              | ✓             | ∩              |
| <b>N</b>                                   | 960                  | 226946               | 782          | 1866           | 2556           | 1030           | 192          | 1785           | 1718           | 1623           | 839         | 810          | 351           | 633           | 470            | 744           | 638            |
|                                            | Ind16                | Ind17                | Ind18        | Ind19          | Ind20          | Ind21          | Ind22        | Ind23          | Ind24          | Ind25          | Ind26       | Ind27        | Ind28         | Ind29         | Ind30          | Ind31         | Ind32          |
| <b>Strategic<br/>Deviation<sup>2</sup></b> | 0.024***             | -0.009***            | -0.012**     | -0.037***      | -0.011***      | -0.015***      | -0.024*      | -0.013***      | -0.014***      | -0.013***      | -0.003      | -0.018*      | -0.044        | 0.003         | -0.011***      | -0.034*       | -0.008         |
| <b>Strategic<br/>Deviation</b>             | -0.096***            | 0.009                | 0.072***     | 0.261***       | 0.055***       | 0.068**        | 0.119*       | 0.071***       | 0.088***       | 0.061***       | -0.017      | 0.083        | 0.203***      | -0.021        | 0.024          | 0.138**       | 0.046          |
| <b>R<sup>2</sup></b>                       | 0.147                | 0.155                | 0.196        | 0.137          | 0.046          | 0.076          | 0.108        | 0.013          | 0.083          | 0.073          | 0.068       | 0.138        | 0.238         | 0.028         | 0.072          | 0.112         | 0.075          |
| <b>uTest (∪ or ∩)</b>                      | ∪***<br>(4.27)       | ∩***<br>(6.17)       | ∩*<br>(2.12) | ∩***<br>(8.78) | ∩***<br>(4.33) | ∩***<br>(3.39) | ∩*<br>(2.26) | ∩***<br>(4.38) | ∩***<br>(3.73) | ∩***<br>(7.37) | N/A         | ∩*<br>(1.71) | ∩<br>(1.20)   | ∪<br>(0.92)   | ∩**<br>(2.33)  | ∩**<br>(2.41) | ∩<br>(0.68)    |
| <b>Relationship</b>                        | ∪                    | ∩                    | ∩            | ∩              | ∩              | ∩              | ∩            | ∩              | ∩              | ∩              | n.s.        | ∩            | +             | n.s.          | ∩              | ∩             | n.s.           |
| <b>N</b>                                   | 809                  | 1409                 | 687          | 421            | 10859          | 1150           | 296          | 2309           | 3554           | 6303           | 12536       | 542          | 229           | 799           | 6143           | 248           | 376            |

*t* statistics in parentheses with \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , two-tailed test.

n.s. means not significant.

N/A means that the turning point is not in the range of strategic deviation.

**Table A.2-continued Results of Dricoll & Kraay Estimation**

|                                        | Ind33     | Ind34     | Ind35     | Ind36     | Ind37    | Ind38    | Ind39    | Ind40     | Ind41     | Ind42     | Ind43     | Ind44     | Ind45  | Ind46   | Ind47  | Ind48     | Ind49    |
|----------------------------------------|-----------|-----------|-----------|-----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|--------|---------|--------|-----------|----------|
| <b>Strategic Deviation<sup>2</sup></b> | -0.008*   | 0.005     | -0.014*** | -0.007*** | -0.008** | 0.019    | -0.008** | -0.011*** | -0.015*** | -0.13***  | 0.008     | -0.015*   | 0.009  | -0.005  | 0.021  | 0.025***  | -0.008*  |
| <b>Strategic Deviation</b>             | 0.003     | 0.003     | 0.087***  | 0.039***  | 0.022    | -0.110   | 0.021*   | 0.058***  | 0.059***  | 0.151     | -0.084*** | 0.060*    | -0.020 | 0.043   | 0.084  | -0.170*** | 0.040*** |
| <b>R<sup>2</sup></b>                   | 0.059     | 0.164     | 0.066     | 0.133     | 0.074    | 0.098    | 0.069    | 0.107     | 0.094     | 0.170     | 0.064     | 0.101     | 0.250  | 0.112   | 0.189  | 0.138     | 0.354    |
| <b>uTest (U or ∩)</b>                  | ∩         | ∪         | ∩***      | ∩**       | ∩*       | ∪        | ∩**      | ∩***      | ∩***      | ∩***      | ∪         | ∩**       | ∪      | ∩       | N/A    | ∪**       | ∩*       |
|                                        | (0.86)    | (0.28)    | (3.20)    | (2.90)    | (1.99)   | (1.05)   | (2.49)   | (6.30)    | (5.86)    | (4.01)    | (0.95)    | (2.43)    | (0.54) | (0.59)  |        | (3.00)    | (2.12)   |
| <b>Relationship</b>                    | ∩         | n.s.      | ∩         | ∩         | ∩        | n.s.     | ∩        | ∩         | ∩         | ∩         | -         | ∩         | n.s.   | n.s.    | n.s.   | ∪         | ∩        |
| <b>N</b>                               | 2290      | 935       | 595       | 1892      | 880      | 158      | 3457     | 3948      | 3754      | 75        | 933       | 1012      | 220    | 1817    | 55     | 648       | 481      |
|                                        | Ind50     | Ind51     | Ind52     | Ind53     | Ind54    | Ind55    | Ind56    | Ind57     | Ind58     | Ind59     | Ind60     | Ind61     | Ind62  | Ind63   | Ind64  | Ind65     | Ind66    |
| <b>Strategic Deviation<sup>2</sup></b> | -0.019*** | -0.015*** | -0.021*   | -0.007*** | -0.009** | 0.000    | -0.006   | -0.027*** | -0.012*   | -0.040*** | -0.023**  | -0.085*** | -0.006 | -0.024* | 0.058* | -0.023*** | -0.009   |
| <b>Strategic Deviation</b>             | 0.075***  | 0.080***  | 0.070*    | 0.009     | 0.004    | 0.025*** | 0.061    | 0.063**   | 0.071***  | 0.245***  | 0.047     | 0.311***  | -0.059 | 0.121*  | -0.033 | 0.094*    | -0.001   |
| <b>R<sup>2</sup></b>                   | 0.131     | 0.074     | 0.254     | 0.127     | 0.109    | 0.073    | 0.127    | 0.187     | 0.178     | 0.257     | 0.142     | 0.194     | 0.126  | 0.150   | 0.362  | 0.064     | 0.174    |
| <b>uTest (U or ∩)</b>                  | ∩***      | ∩***      | ∩*        | ∩**       | ∩*       | N/A      | ∩        | ∩***      | ∩*        | ∩***      | ∩*        | ∩***      | N/A    | ∩*      | ∪      | ∩**       | ∩        |
|                                        | (19.20)   | (5.04)    | (2.24)    | (2.40)    | (1.99)   |          | (0.66)   | (3.37)    | (1.66)    | (4.49)    | (1.73)    | (4.86)    |        | (2.16)  | (1.32) | (2.99)    | (0.23)   |
| <b>Relationship</b>                    | ∩         | ∩         | ∩         | ∩         | ∩        | +        | n.s.     | ∩         | ∩         | ∩         | ∩         | ∩         | n.s.   | ∩       | ∩      | ∩         | n.s.     |
| <b>N</b>                               | 3770      | 1612      | 673       | 3100      | 1349     | 4503     | 1226     | 824       | 706       | 148       | 763       | 180       | 163    | 248     | 79     | 1026      | 341      |

*t* statistics in parentheses with \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , two-tailed test.

n.s. means not significant.

N/A means that the turning point is not in the range of strategic deviation.

**Table A.2-continued Results of Dricoll & Kraay Estimation**

|                                        | Ind67          | Ind68         | Ind69       | Ind70          | Ind71          | Ind72          | Ind73       | Ind74       | Ind75       | Ind76        | Ind77    | Ind78        | Ind79          | Ind80         | Ind81          | Ind82    | Ind83          |
|----------------------------------------|----------------|---------------|-------------|----------------|----------------|----------------|-------------|-------------|-------------|--------------|----------|--------------|----------------|---------------|----------------|----------|----------------|
| <b>Strategic Deviation<sup>2</sup></b> | -0.014         | -0.010        | -0.033      | -0.064**       | -0.006*        | -0.013         | -0.005      | -0.002      | -0.006*     | -0.012***    | 0.000    | -0.019*      | 0.015***       | -0.017***     | -0.013         | -0.001   | -0.015**       |
| <b>Strategic Deviation</b>             | 0.033          | 0.051*        | 0.085       | -0.019         | 0.040*         | 0.072          | -0.007      | 0.019       | 0.015       | 0.057        | 0.027    | 0.114***     | -0.097***      | 0.082*        | 0.004          | 0.048*** | 0.054**        |
| <b>R<sup>2</sup></b>                   | 0.106          | 0.222         | 0.312       | 0.231          | 0.173          | 0.273          | 0.094       | 0.095       | 0.098       | 0.128        | 0.106    | 0.218        | 0.216          | 0.106         | 0.083          | 0.175    | 0.071          |
| <b>uTest (∪ or ∩)</b>                  | ∩<br>(0.82)    | ∩<br>(1.04)   | ∩<br>(1.37) | ∩<br>(1.20)    | ∩*<br>(1.81)   | ∩<br>(1.11)    | ∩<br>(0.18) | ∩<br>(0.60) | ∩<br>(1.10) | ∩*<br>(2.34) | N/A      | ∩*<br>(1.69) | ∪***<br>(3.72) | ∩**<br>(2.92) | ∩<br>(0.39)    | N/A      | ∩**<br>(2.80)  |
| <b>Relationship</b>                    | n.s.           | +             | n.s.        | ∩              | ∩              | n.s.           | n.s.        | n.s.        | ∩           | ∩            | n.s.     | ∩            | ∪              | ∩             | n.s.           | +        | ∩              |
| <b>N</b>                               | 489            | 570           | 45          | 176            | 797            | 248            | 1263        | 1635        | 1384        | 778          | 528      | 1250         | 1296           | 2058          | 1284           | 5496     | 1885           |
|                                        | Ind84          | Ind85         | Ind86       | Ind87          | Ind88          | Ind89          | Ind90       | Ind91       | Ind92       | Ind93        | Ind94    | Ind95        | Ind96          | Ind97         | Ind98          | Ind99    | Ind100         |
| <b>Strategic Deviation<sup>2</sup></b> | -0.010***      | -0.019**      | -0.009      | -0.012***      | -0.019***      | -0.058***      | -0.038*     | -0.004      | 0.002       | -0.010       | -0.048   | -0.005       | 0.004          | -0.005***     | -0.013***      | -0.004   | -0.031***      |
| <b>Strategic Deviation</b>             | 0.029***       | 0.087**       | 0.028       | 0.057***       | 0.097***       | 0.237***       | 0.194       | 0.029*      | 0.019       | -0.015       | -0.250** | 0.006        | -0.050         | -0.010        | 0.066***       | -0.046*  | 0.111***       |
| <b>R<sup>2</sup></b>                   | 0.082          | 0.111         | 0.125       | 0.159          | 0.165          | 0.211          | 0.172       | 0.054       | 0.194       | 0.101        | 0.204    | 0.206        | 0.170          | 0.060         | 0.087          | 0.077    | 0.099          |
| <b>uTest (∪ or ∩)</b>                  | ∩***<br>(6.60) | ∩**<br>(2.67) | ∩<br>(1.34) | ∩***<br>(4.89) | ∩***<br>(9.40) | ∩***<br>(7.45) | ∩<br>(1.68) | ∩<br>(1.23) | N/A         | ∩<br>(0.38)  | N/A      | ∩<br>(0.16)  | ∪<br>(0.10)    | ∩<br>(0.42)   | ∩***<br>(3.99) | N/A      | ∩***<br>(5.13) |
| <b>Relationship</b>                    | ∩              | ∩             | n.s.        | ∩              | ∩              | ∩              | ∩           | +           | n.s.        | n.s.         | -        | n.s.         | n.s.           | ∩             | ∩              | -        | ∩              |
| <b>N</b>                               | 4523           | 2857          | 1823        | 1156           | 1192           | 361            | 110         | 3155        | 714         | 834          | 64       | 257          | 214            | 2300          | 2633           | 1759     | 1006           |

*t* statistics in parentheses with \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , two-tailed test.

n.s. means not significant.

N/A means that the turning point is not in the range of strategic deviation.

**Table A.2-continued Results of Dricoll & Kraay Estimation**

|                                        | Ind101  | Ind102    | Ind103 | Ind104    | Ind105  | Ind106   | Ind107  | Ind108  | Ind109  | Ind110    | Ind111   | Ind112  | Ind113    | Ind114    | Ind115    | Ind116    | Ind117    |
|----------------------------------------|---------|-----------|--------|-----------|---------|----------|---------|---------|---------|-----------|----------|---------|-----------|-----------|-----------|-----------|-----------|
| <b>Strategic Deviation<sup>2</sup></b> | -0.034* | 0.007     | 0.003  | -0.059    | -0.001  | -0.027** | -0.011  | 0.012** | -0.007  | -0.015*** | -0.011*  | -0.007* | -0.003    | -0.007*** | -0.019*** | -0.012*** | -0.012    |
| <b>Strategic Deviation</b>             | 0.064   | -0.029*** | -0.001 | 0.045     | -0.022  | 0.096**  | 0.087** | -0.047  | 0.020*  | 0.065***  | 0.031    | -0.000  | -0.022*   | 0.007     | 0.085***  | 0.038***  | 0.058**   |
| <b>R<sup>2</sup></b>                   | 0.087   | 0.067     | 0.141  | 0.121     | 0.090   | 0.216    | 0.079   | 0.129   | 0.124   | 0.103     | 0.078    | 0.088   | 0.072     | 0.110     | 0.088     | 0.169     | 0.128     |
| <b>uTest (U or ∩)</b>                  | ∩*      | U         | U      | ∩         | N/A     | ∩**      | ∩       | U*      | ∩       | ∩***      | ∩*       | ∩       | N/A       | ∩*        | ∩***      | ∩**       | ∩         |
|                                        | (2.09)  | (1.32)    | (0.98) | (0.87)    |         | (2.71)   | (1.15)  | (1.89)  | (1.06)  | (13.88)   | (1.88)   | (1.47)  |           | (2.29)    | (6.42)    | (3.07)    | (1.39)    |
| <b>Relationship</b>                    | ∩       | -         | n.s.   | n.s.      | n.s.    | ∩        | +       | U       | +       | ∩         | ∩        | ∩       | -         | ∩         | ∩         | ∩         | ∩         |
| <b>N</b>                               | 877     | 2023      | 923    | 149       | 1790    | 846      | 933     | 1375    | 1081    | 3364      | 1941     | 2491    | 2195      | 3532      | 1270      | 1688      | 449       |
|                                        | Ind118  | Ind119    | Ind120 | Ind121    | Ind122  | Ind123   | Ind124  | Ind125  | Ind126  | Ind127    | Ind128   | Ind129  | Ind130    | Ind131    | Ind132    | Ind133    | Ind134    |
| <b>Strategic Deviation<sup>2</sup></b> | -0.002  | -0.016**  | 0.019  | 0.017***  | -0.025* | 0.001    | -0.007  | -0.004  | -0.007* | -0.011    | -0.020** | 0.043*  | -0.017*** | -0.008*** | -0.008*   | -0.006*** | -0.010*** |
| <b>Strategic Deviation</b>             | -0.025  | 0.004     | -0.105 | -0.134*** | 0.031   | -0.009   | -0.051  | -0.006  | 0.026   | 0.060     | 0.064**  | -0.002  | 0.055     | 0.002     | -0.001    | -0.007    | 0.017*    |
| <b>R<sup>2</sup></b>                   | 0.103   | 0.069     | 0.259  | 0.050     | 0.248   | 0.196    | 0.259   | 0.094   | 0.073   | 0.110     | 0.101    | 0.425   | 0.116     | 0.101     | 0.099     | 0.107     | 0.073     |
| <b>uTest (U or ∩)</b>                  | N/A     | ∩         | U      | U***      | ∩*      | U        | N/A     | ∩       | ∩*      | ∩         | ∩**      | U*      | ∩**       | ∩**       | ∩         | ∩         | ∩***      |
|                                        |         | (1.30)    | (1.09) | (5.80)    | (2.06)  | (0.04)   |         | (0.24)  | (1.90)  | (1.20)    | (2.63)   | (2.30)  | (2.43)    | (2.51)    | (0.81)    | (0.64)    | (3.18)    |
| <b>Relationship</b>                    | n.s.    | ∩         | n.s.   | U         | ∩       | n.s.     | n.s.    | n.s.    | ∩       | n.s.      | ∩        | U       | ∩         | ∩         | ∩         | ∩         | ∩         |
| <b>N</b>                               | 619     | 1140      | 209    | 573       | 498     | 616      | 220     | 6265    | 1692    | 948       | 434      | 53      | 1538      | 4048      | 3524      | 739       | 2240      |

*t* statistics in parentheses with \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , two-tailed test.

n.s. means not significant.

N/A means that the turning point is not in the range of strategic deviation.

**Table A.2-continued Results of Dricoll & Kraay Estimation**

|                                        | Ind135      | Ind136      | Ind137       | Ind138      | Ind139      | Ind140        | Ind141      | Ind142      | Ind143      | Ind144      | Ind145       | Ind146         | Ind147      | Ind148    | Ind149   | Ind150      | Ind151         |
|----------------------------------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|--------------|----------------|-------------|-----------|----------|-------------|----------------|
| <b>Strategic Deviation<sup>2</sup></b> | -0.004      | 0.003       | -0.051*      | -0.016*     | -0.037**    | 0.038***      | -0.006      | -0.003      | 0.015       | 0.002       | -0.012*      | 0.055***       | 0.013       | -0.003    | 0.004    | -0.006      | -0.022***      |
| <b>Strategic Deviation</b>             | 0.069       | -0.082***   | 0.060        | 0.001       | 0.001       | -0.263***     | 0.029       | -0.003      | -0.163**    | 0.004       | 0.068        | -0.054***      | -0.155**    | -0.062*** | -0.186** | 0.041       | 0.037          |
| <b>R<sup>2</sup></b>                   | 0.083       | 0.055       | 0.111        | 0.180       | 0.102       | 0.090         | 0.241       | 0.124       | 0.093       | 0.225       | 0.170        | 0.185          | 0.121       | 0.114     | 0.100    | 0.074       | 0.091          |
| <b>uTest (U or ∩)</b>                  | ∩<br>(0.06) | N/A         | ∩*<br>(1.82) | ∩<br>(0.65) | ∩<br>(1.24) | U**<br>(2.78) | ∩<br>(0.85) | ∩<br>(0.28) | U<br>(1.14) | U<br>(0.00) | ∩*<br>(1.90) | U***<br>(5.11) | U<br>(0.53) | N/A       | N/A      | ∩<br>(0.98) | ∩***<br>(4.46) |
| <b>Relationship</b>                    | n.s.        | -           | ∩            | ∩           | ∩           | U             | n.s.        | n.s.        | -           | n.s.        | ∩            | U              | -           | -         | -        | n.s.        | ∩              |
| <b>N</b>                               | 268         | 2557        | 155          | 866         | 228         | 815           | 1070        | 3625        | 771         | 243         | 1249         | 158            | 450         | 733       | 381      | 4049        | 1390           |
|                                        | Ind152      | Ind153      | Ind154       | Ind155      |             |               |             |             |             |             |              |                |             |           |          |             |                |
| <b>Strategic Deviation<sup>2</sup></b> | -0.005      | 0.351       | -0.012       | -0.064      |             |               |             |             |             |             |              |                |             |           |          |             |                |
| <b>Strategic Deviation</b>             | -0.037      | 0.075       | 0.119*       | -0.032      |             |               |             |             |             |             |              |                |             |           |          |             |                |
| <b>R<sup>2</sup></b>                   | 0.260       | 0.307       | 0.226        | 0.186       |             |               |             |             |             |             |              |                |             |           |          |             |                |
| <b>uTest (U or ∩)</b>                  | N/A         | U<br>(1.46) | ∩<br>(0.89)  | ∩<br>(0.45) |             |               |             |             |             |             |              |                |             |           |          |             |                |
| <b>Relationship</b>                    | n.s.        | n.s.        | +            | n.s.        |             |               |             |             |             |             |              |                |             |           |          |             |                |
| <b>N</b>                               | 136         | 51          | 542          | 97          |             |               |             |             |             |             |              |                |             |           |          |             |                |

*t* statistics in parentheses with \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , two-tailed test.

n.s. means not significant.

N/A means that the turning point is not in the range of strategic deviation.

**Table A.3: LIST OF INDUSTRIES**

- |                                                            |                                                                                                     |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 1. Construction sand and gravel mining                     | 34. Lumber and Wood Products                                                                        |
| 2. Grain mills                                             | 35. Bamboo, rattan, palm, grass products                                                            |
| 3. Prepared feeds                                          | 36. Furniture, wood                                                                                 |
| 4. Vegetable oil mills                                     | 37. Furniture, metal                                                                                |
| 5. Sugar                                                   | 38. Other furniture                                                                                 |
| 6. Slaughtering and meat processing                        | 39. Paper Mills                                                                                     |
| 7. Aquatic products processing                             | 40. Paper and Allied Products                                                                       |
| 8. Vegetables, fruits, and nuts processing                 | 41. Printing                                                                                        |
| 9. Other grain mill products                               | 42. Support Activities for Printing                                                                 |
| 10. Bakery Products                                        | 43. Pens, Pencils, and other Artists Materials                                                      |
| 11. Confectionery Products                                 | 44. Sporting and Athletic Goods                                                                     |
| 12. Instant food and related products                      | 45. Musical Instruments                                                                             |
| 13. Dairy Products                                         | 46. Dolls and Toys                                                                                  |
| 14. Canned products                                        | 47. Games                                                                                           |
| 15. Seasoning and Dressing Manufacturing                   | 48. Petroleum Refining                                                                              |
| 16. Other food manufacturing                               | 49. Coal Coking                                                                                     |
| 17. Breweries and Wineries                                 | 50. Basic Chemicals and Allied Products                                                             |
| 18. Soft Drinks                                            | 51. Agricultural Chemicals, Fertilizers                                                             |
| 19. Tea refining and processing                            | 52. Agricultural Chemicals, Pesticides                                                              |
| 20. Broadwoven Fabric Mills, Cotton                        | 53. Paints, Varnishes, Lacquers, Enamels, and Allied Products                                       |
| 21. Broadwoven Fabric Mills, Wool                          | 54. Plastics Materials and Synthetic Resins, Synthetic Rubber                                       |
| 22. Broadwoven fabrics: linen, jute, hemp, and ramie       | 55. Specialty Chemicals                                                                             |
| 23. Broadwoven Fabric Mills, Silk                          | 56. Soap, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations |
| 24. Textile Furnishings Mills                              | 57. Medicinal chemicals, bulk                                                                       |
| 25. Knitting Mills                                         | 58. Medicinal chemicals manufacturing                                                               |
| 26. Apparel and other Finished Products Made from Fabrics  | 59. Botanical Products processing                                                                   |
| 27. Apparel and other Finished Products Made from Knitting | 60. Botanical Products manufacturing                                                                |
| 28. Miscellaneous Apparel and Accessories                  | 61. Animal medicine Manufacturing                                                                   |
| 29. Leather Tanning and processing                         | 62. Biological Products                                                                             |
| 30. Leather and Leather Products                           | 63. Pharmaceutical Preparations                                                                     |
| 31. Fur Tanning and processing                             | 64. Cellulosic Manmade Fibers                                                                       |
| 32. Fur goods                                              | 65. Synthetic fiber                                                                                 |
| 33. Millwork, Veneer, Plywood, and Structural Wood         | 66. Tire Manufacturing                                                                              |

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|------------------------------------------------------------------|----------------------------------------------------------------------------|
| 67. Rubber plates, tubes, and tapes                              | 101. Metal string and allied products                                      |
| 68. Gaskets, Packing, and Sealing Devices and Rubber             | 102. Architectural and Structural Metals Manufacturing                     |
| 69. Recycling rubbers                                            | 103. Plating and Polishing                                                 |
| 70. Necessary and medical rubbers                                | 104. Enameling                                                             |
| 71. Rubber footwear                                              | 105. Stainless necessities and allied products                             |
| 72. Miscellaneous rubber Products                                | 106. Miscellaneous Fabricated Metal Products                               |
| 73. Plastics Film and Sheet                                      | 107. Engines and Turbines                                                  |
| 74. Plastics Plate, Pipe, and Profile Shapes                     | 108. Metalworking Machinery and Equipment                                  |
| 75. Plastics string and Fabrics                                  | 109. Hoists, Cranes, and Monorails                                         |
| 76. Plastics Foam Products                                       | 110. Pumps and Pumping Equipment                                           |
| 77. Plastics leathers                                            | 111. Bearings, Drives, and Gears                                           |
| 78. Plastics containers                                          | 112. Blowers and Fans                                                      |
| 79. Plastics Components                                          | 113. Machine Tools                                                         |
| 80. Plastics Necessaries                                         | 114. Metal casting and forging                                             |
| 81. Miscellaneous Plastics Products                              | 115. Mining Machinery                                                      |
| 82. Concrete, Gypsum, and Plaster manufacturing                  | 116. Woodworking Machinery                                                 |
| 83. Concrete, Gypsum, and Plaster Products                       | 117. Food Products Machinery                                               |
| 84. Brick and Structural Clay Tile                               | 118. Printing Trades Machinery and Equipment                               |
| 85. Glass and Glassware                                          | 119. Textile Machinery                                                     |
| 86. Pottery and Related Products                                 | 120. Electronic and engineer machinery                                     |
| 87. Refractories                                                 | 121. Farm Machinery and Equipment                                          |
| 88. Graphite and Miscellaneous Nonmetallic Mineral Products      | 122. Medical machinery and Equipment                                       |
| 89. Iron Foundries                                               | 123. Environmental protection and Miscellaneous Special Industry Machinery |
| 90. Steel Foundries                                              | 124. Railroad Equipment                                                    |
| 91. Steel Works, Blast Furnaces, and Rolling and Finishing Mills | 125. Motor Vehicles and Motor Vehicle Equipment                            |
| 92. Ferroalloys                                                  | 126. Motorcycles                                                           |
| 93. Nonferrous foundries                                         | 127. Bicycles                                                              |
| 94. Gold, Silver, and other Platinum refining                    | 128. Ship and Boat Building and Repairing                                  |
| 95. Rare Earth Metals refining                                   | 129. Aircraft and Parts                                                    |
| 96. Nonferrous alloys                                            | 130. Motors and Generators                                                 |
| 97. Nonferrous Foundries                                         | 131. Power, Distribution and Specialty Transformers                        |
| 98. Fabricated Structural Metal                                  | 132. Wiring Devices                                                        |
| 99. Metal tools                                                  | 133. Battery                                                               |
| 100. Metal Cans and Shipping Containers                          | 134. Electrical Household Appliances                                       |

|                                                                                          |                                                |
|------------------------------------------------------------------------------------------|------------------------------------------------|
| 135.Non-Electrical Household Appliances                                                  | 146.Special industry Apparatus and Instruments |
| 136.Lighting equipment                                                                   | 147.Watches, Clocks, Clockwork Operated        |
| 137.Miscellaneous Electrical Machinery, Equipment, and Supplies                          | Devices, and Parts                             |
| 138.Communications Equipment                                                             | 148.Optical and Ophthalmic Goods               |
| 139.Radio and Television Broadcasting and Communications Equipment                       | 149.Office equipment and supplies              |
| 140.Computers manufacturing                                                              | 150.Artwork, Jewelry, Silverware, and Plated   |
| 141.Electronic devices                                                                   | 151.Necessaries                                |
| 142.Electronic Components                                                                | 152.Miscellaneous Manufacturing                |
| 143.Radio and Television. Communications Equipment                                       | 153.Nonmetallic scrap processing               |
| 144.Miscellaneous Communications Equipment                                               | 154.Electric generation                        |
| 145.Laboratory Apparatus and Analytical, Optical, Measuring, and Controlling Instruments | 155.Gas generation and distribution            |
|                                                                                          | 156.Salt mining*                               |
|                                                                                          | 157.Furniture, plastic*                        |
|                                                                                          | 158.Pulp Mills*                                |
|                                                                                          | 159.Industrial Furnaces and Ovens*             |

\* These four industries were not included in individual analysis due to the number of observations was too few to conduct individual analysis

