# A correction note on "Maximum likelihood estimate of default correlations"

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Norbert Jobst pointed out to us we have not built correctly the S&P database in [1]. Using correct data, we obtain the results in Table 1. Compared to the results published in Risk Magazine, we obtain significant differences. Nevertheless, the conclusions remain the same.

| | | | Two-factor | | Single-factor | |
|---|---|---|---|---|---|---|
| | $\bar{N}_c$ | $\bar{\mu}_c$ | Asymptotic | Binomial | Asymptotic | Binomial |
| Aerospace / Automobile | 301 | 2.08% | 13.0% | 11.2% | 13.8% | 11.6% |
| Consumer / Service sector | 355 | 2.37% | 10.7% | 8.7% | 10.8% | 7.5% |
| Energy / Natural ressources | 149 | 2.10% | 20.6% | 21.3% | 13.8% | 11.5% |
| Financial institutions | 538 | 0.57% | 16.5% | 15.7% | 13.3% | 12.2% |
| Forest / Building products | 112 | 1.90% | 8.8% | 6.8% | 14.2% | 14.5% |
| Health | 152 | 1.27% | 10.5% | 8.3% | 10.1% | 9.2% |
| High technology | 97 | 1.66% | 11.8% | 6.8% | 8.2% | 4.7% |
| Insurance | 261 | 0.61% | 24.9% | 12.2% | 17.3% | 7.6% |
| Leisure time / Media | 169 | 3.01% | 10.0% | 7.0% | 11.0% | 7.0% |
| Real estate | 61 | 1.01% | 39.3% | 35.9% | 31.7% | 27.7% |
| Telecoms | 120 | 1.91% | 20.0% | 27.1% | 25.7% | 34.3% |
| Transportation | 135 | 2.02% | 10.1% | 6.8% | 11.2% | 8.3% |
| Utilities | 354 | 0.43% | 14.3% | 18.3% | 15.0% | 21.2% |
| Inter-sector | | | 5.3% | 6.8% | ✓ | ✓ |
| Mean | | | 16.2% | 14.3% | 15.1% | 13.6% |

Table 1. Asymptotic and binomial MLE2 estimates of the asset correlations extracted from the S&P database

**Remark 1** *If we pool all the sector activities to define only one risk class, the 'binomial' and 'asymptotic' estimates of correlation become* 6.3% *and* 7.4%.

## Acknowledgment

We would like to thank Norbert Jobst from S&P to draw our attention to the problem.

## References

[1] Demey, P., J-F. Jouanin, C. Roget and T. Roncalli [2004], Maximum likelihood estimate of default correlations, *Risk*, **17-11**, November, pages 104-108