Figure 1: Values of RB (%) of the estimators $\widehat{C}_{p.R}$ (using the sample ranges and the constant d_2), $\widehat{C}_{p.R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{C}_{p.S}$ (using the sample standard deviations) and $\widehat{C}_{p.P}$ (using the pooled sample standard deviation) of $C_p = 1$. Data are selected from the Normal distribution and $\sigma = 1$.
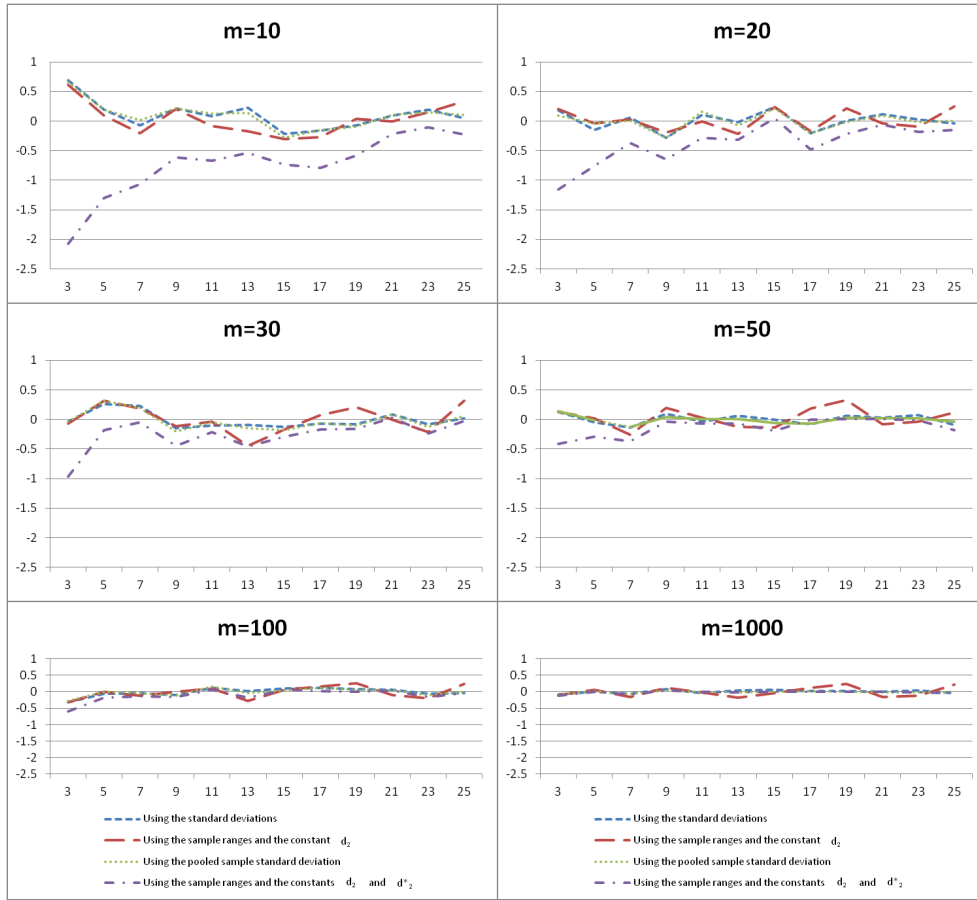
Figure 2: Values of RB (%) of the estimators $\widehat{\sigma}_R$ (using the sample ranges and the constant d_2), $\widehat{\sigma}_{R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{\sigma}_S$ (using the sample standard deviations) and $\widehat{\sigma}_P$ (using the pooled sample standard deviation) of $\sigma = 1$. Data are selected from the Normal distribution.
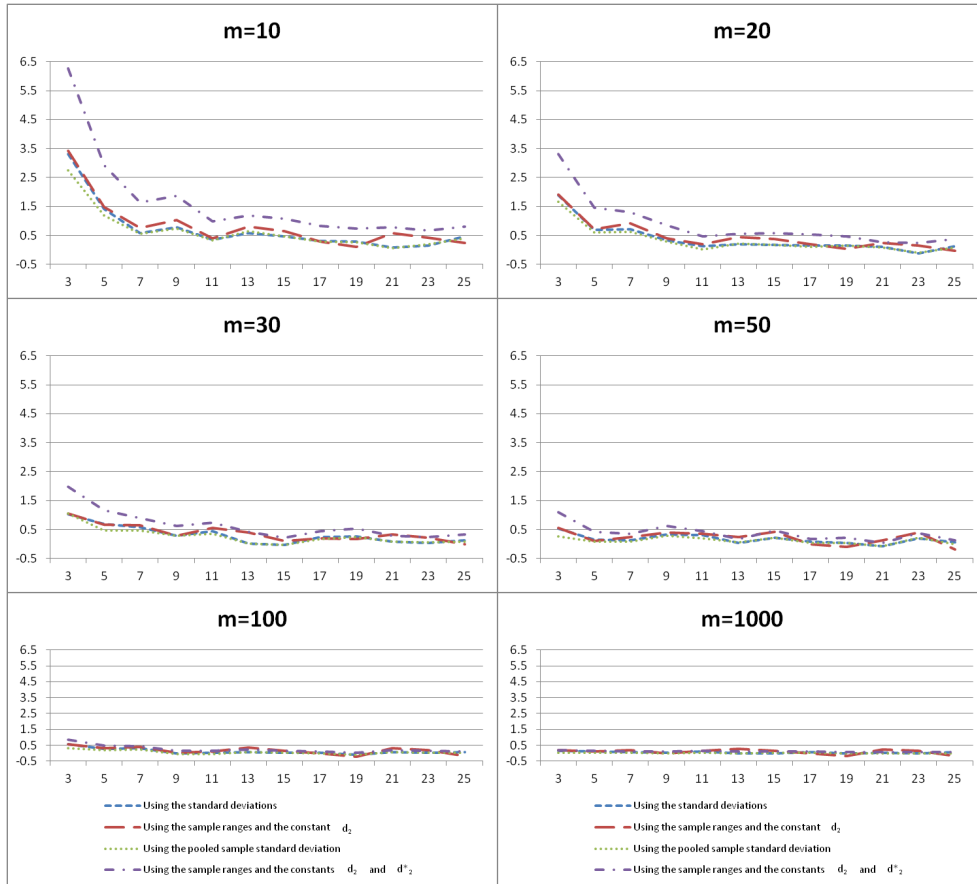
Figure 3: Values of RB (%) of the estimators $\widehat{C}_{p.R}$ (using the sample ranges and the constant d_2), $\widehat{C}_{p.R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{C}_{p.S}$ (using the sample standard deviations) and $\widehat{C}_{p.P}$ (using the pooled sample standard deviation) of $C_p = 1$. Data are selected from the Gamma distribution and $\sigma = 1$.
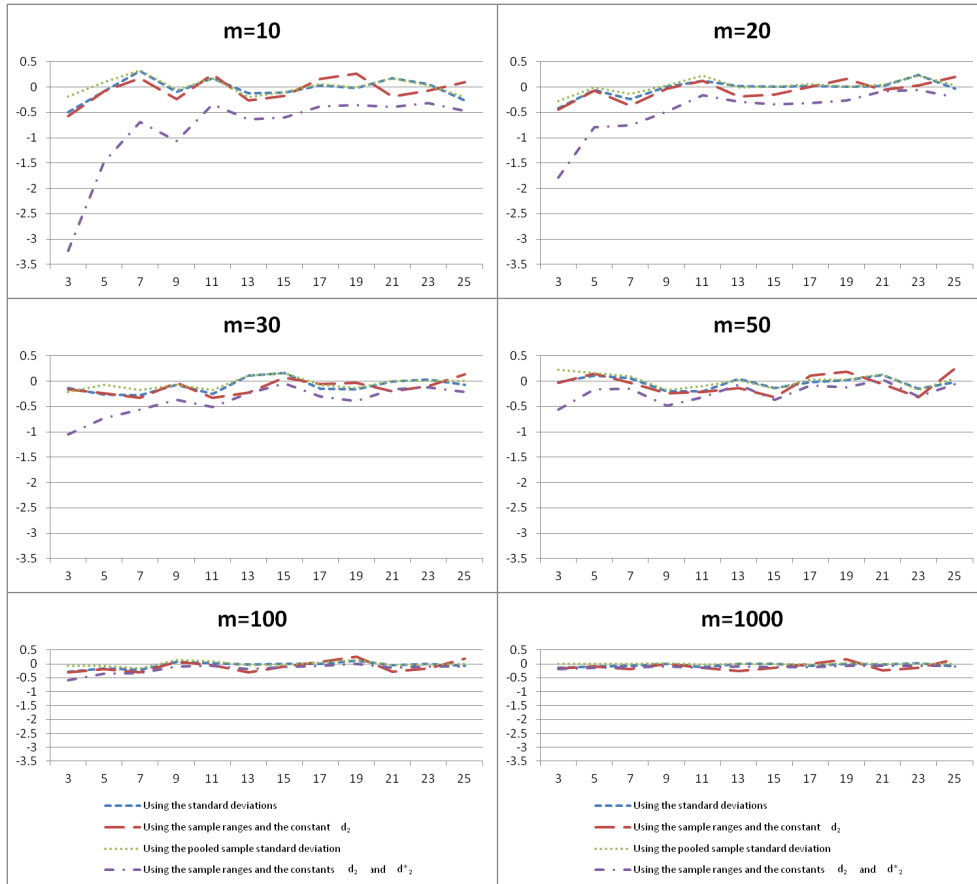
Figure 4: Values of RB (%) of the estimators $\widehat{\sigma}_R$ (using the sample ranges and the constant d_2), $\widehat{\sigma}_{R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{\sigma}_S$ (using the sample standard deviations) and $\widehat{\sigma}_P$ (using the pooled sample standard deviation) of $\sigma = 1$. Data are selected from the Gamma distribution.
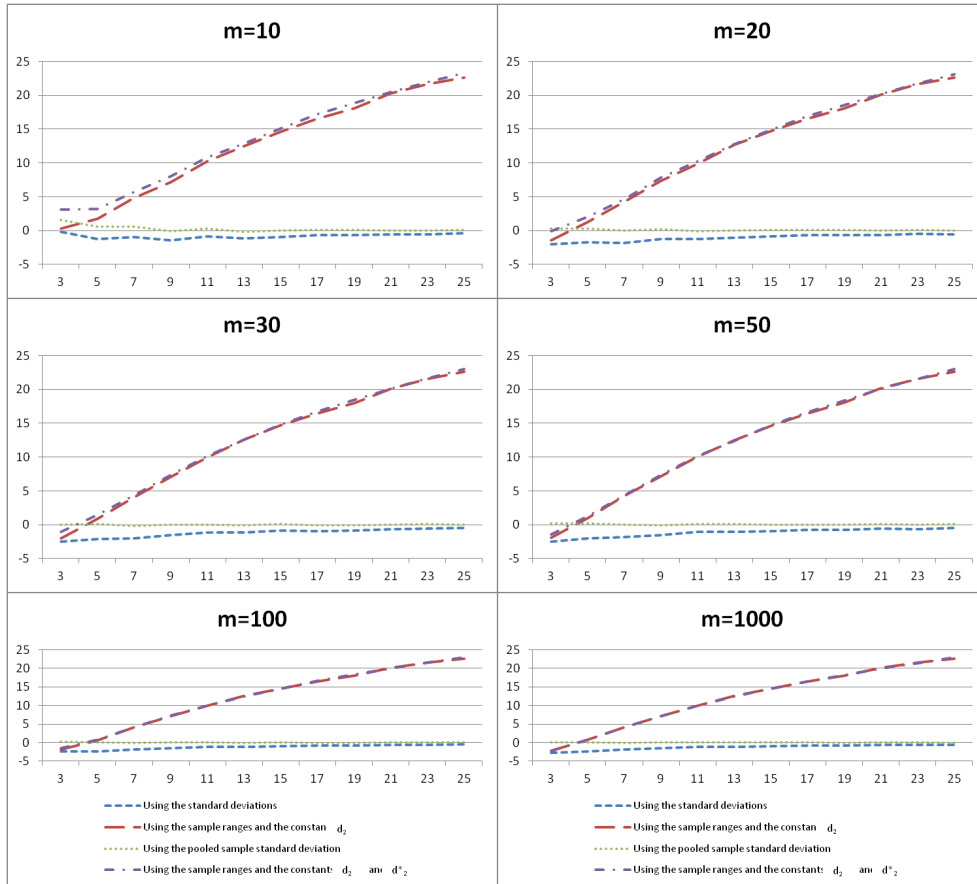
Figure 5: Values of RB (%) of the estimators $\widehat{C}_{p.R}$ (using the sample ranges and the constant d_2), $\widehat{C}_{p.R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{C}_{p.S}$ (using the sample standard deviations) and $\widehat{C}_{p.P}$ (using the pooled sample standard deviation) of $C_p = 1$. Data are selected from the Uniform distribution and $\sigma = 1$.
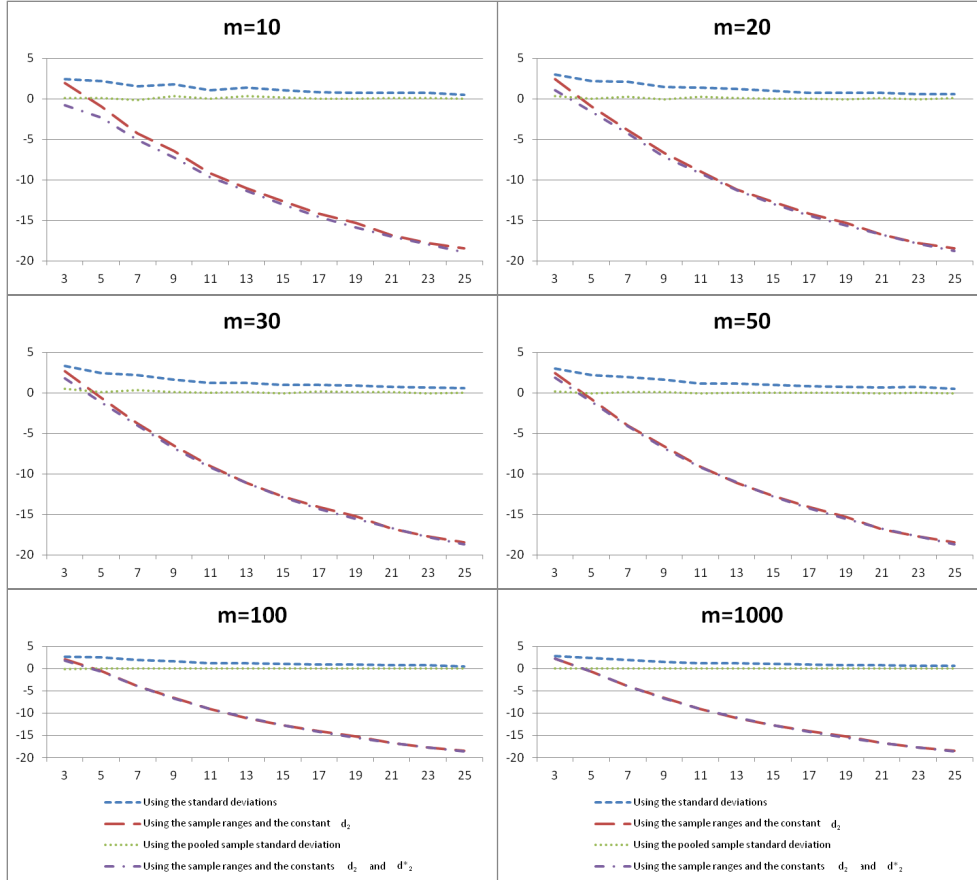
Figure 6: Values of RB (%) of the estimators $\widehat{\sigma}_R$ (using the sample ranges and the constant d_2), $\widehat{\sigma}_{R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{\sigma}_S$ (using the sample standard deviations) and $\widehat{\sigma}_P$ (using the pooled sample standard deviation) of $\sigma = 1$. Data are selected from the Uniform distribution.
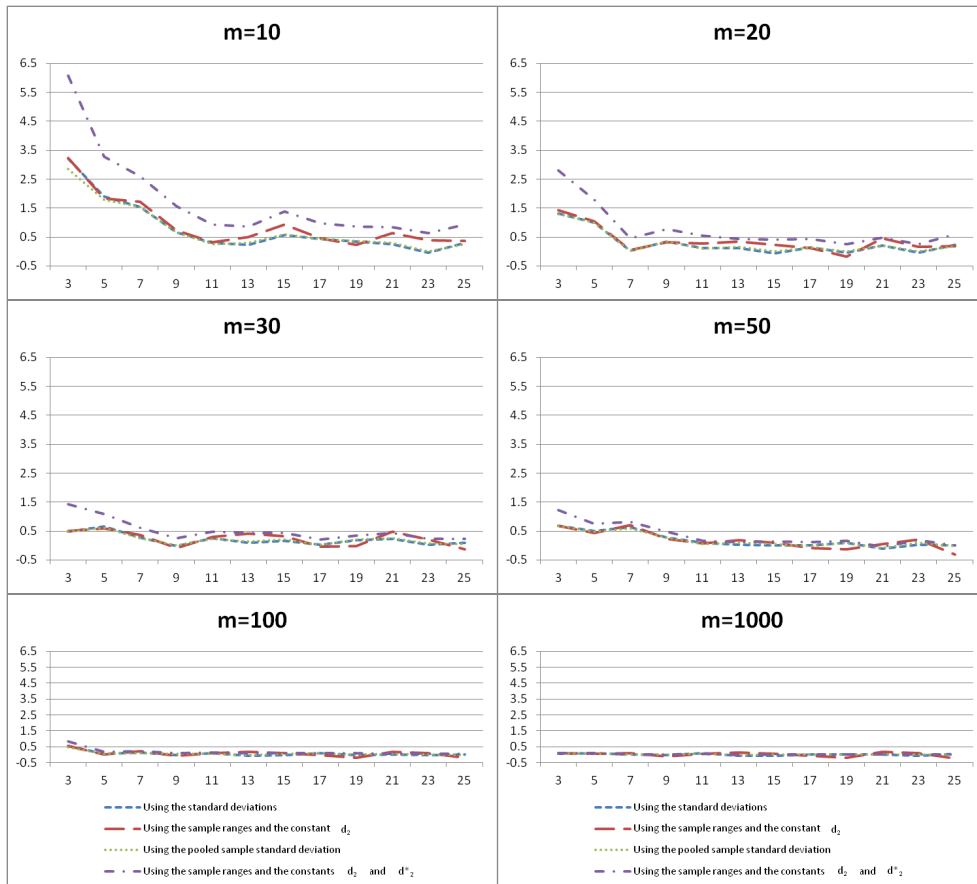
Figure 7: Values of RB (%) of the estimators $\widehat{C}_{pk.R}$ (using the sample ranges and the constant d_2), $\widehat{C}_{pk.R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{C}_{pk.S}$ (using the sample standard deviations) and $\widehat{C}_{pk.P}$ (using the pooled sample standard deviation) of $C_{pk} = 1$. Data are selected from the Normal distribution, $\sigma = 1$ and the process is off-center.
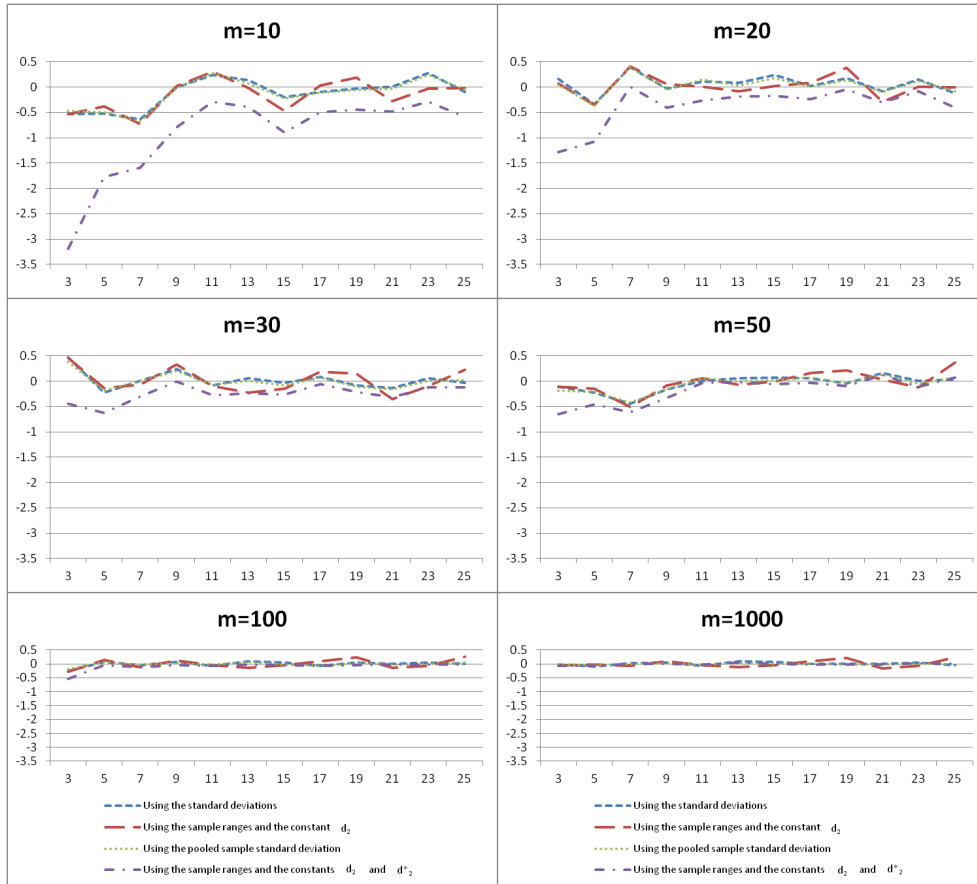
Figure 8: Values of RB (%) of the estimators $\widehat{\sigma}_R$ (using the sample ranges and the constant d_2), $\widehat{\sigma}_{R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{\sigma}_S$ (using the sample standard deviations) and $\widehat{\sigma}_P$ (using the pooled sample standard deviation) of $\sigma = 1$. Data are selected from the Normal distribution and the process is off-center.
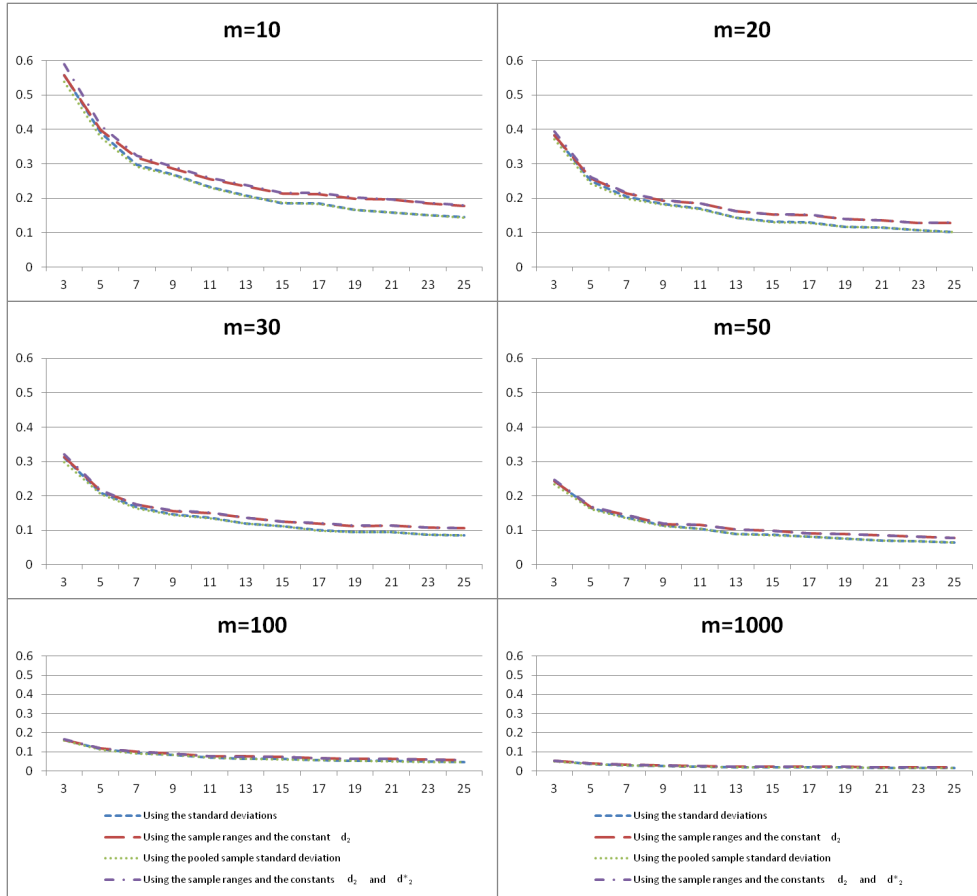
Figure 9: Values of RRMSE (%) of the estimators $\widehat{C}_{p.R}$ (using the sample ranges and the constant d_2), $\widehat{C}_{p.R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{C}_{p.S}$ (using the sample standard deviations) and $\widehat{C}_{p.P}$ (using the pooled sample standard deviation) of $C_p = 1$. Data are selected from the Normal distribution and $\sigma = 1$.
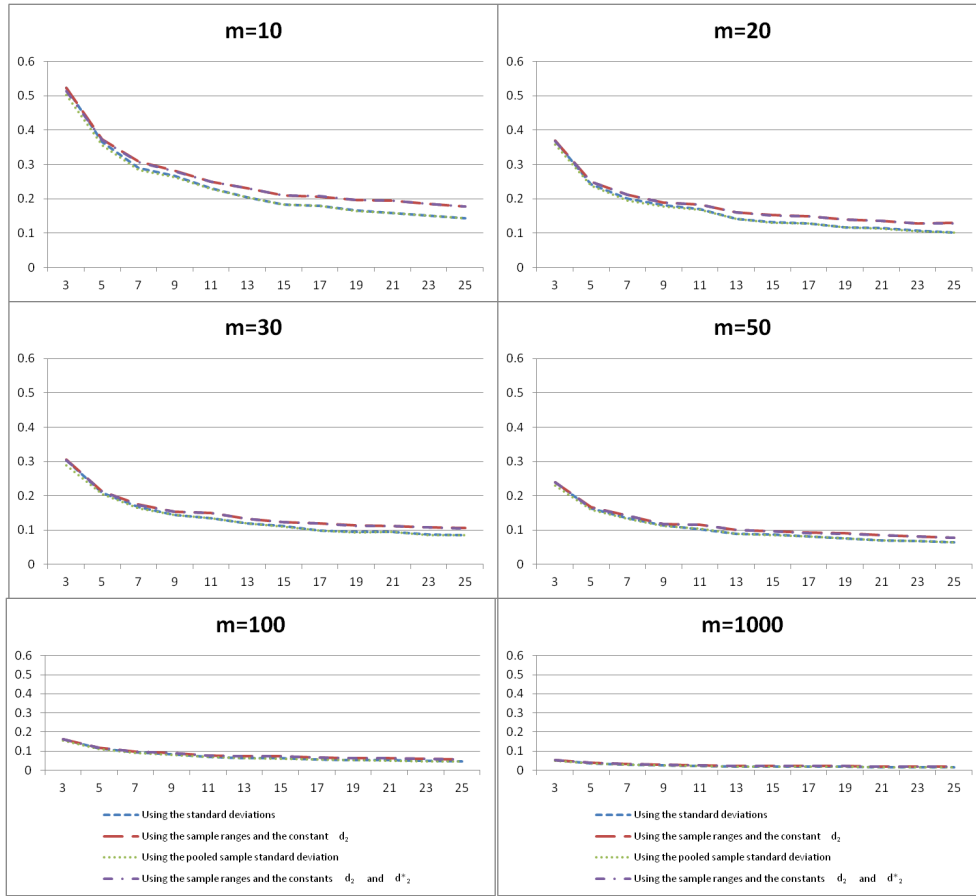
Figure 10: Values of RRMSE (%) of the estimators $\widehat{\sigma}_R$ (using the sample ranges and the constant d_2), $\widehat{\sigma}_{R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{\sigma}_S$ (using the sample standard deviations) and $\widehat{\sigma}_P$ (using the pooled sample standard deviation) of $\sigma = 1$. Data are selected from the Normal distribution.
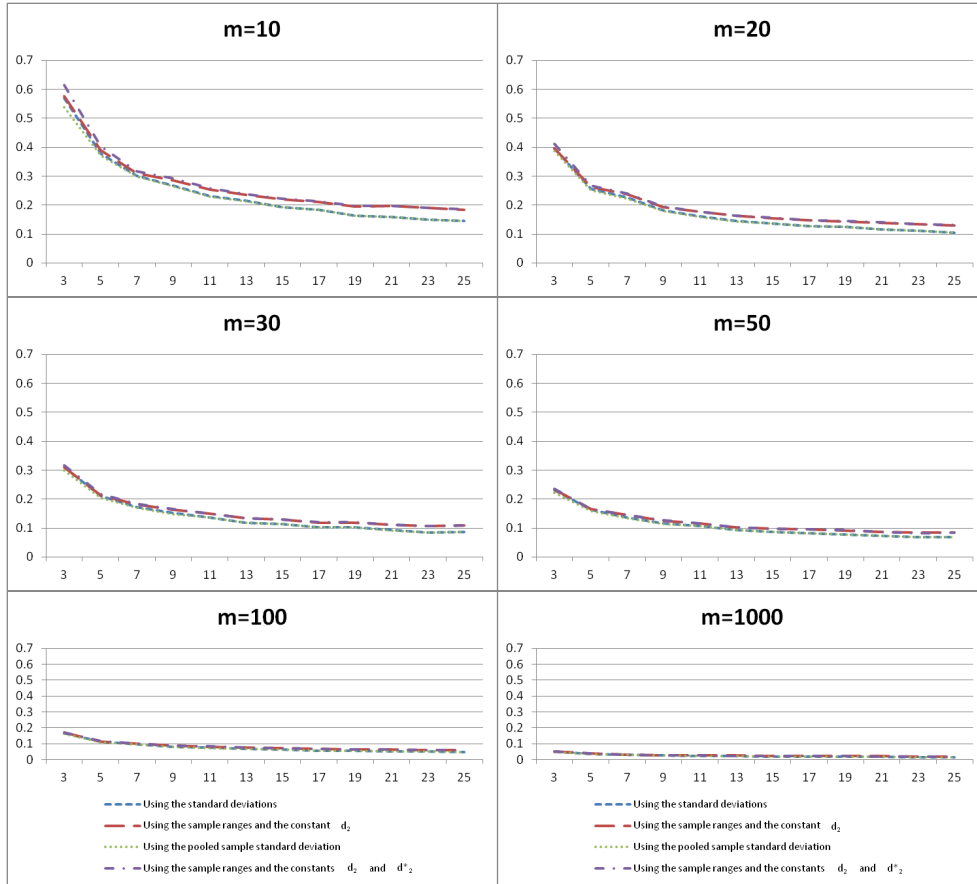
Figure 11: Values of RRMSE (%) of the estimators $\widehat{C}_{p.R}$ (using the sample ranges and the constant d_2), $\widehat{C}_{p.R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{C}_{p.S}$ (using the sample standard deviations) and $\widehat{C}_{p.P}$ (using the pooled sample standard deviation) of $C_p = 1$. Data are selected from the Gamma distribution and $\sigma = 1$.
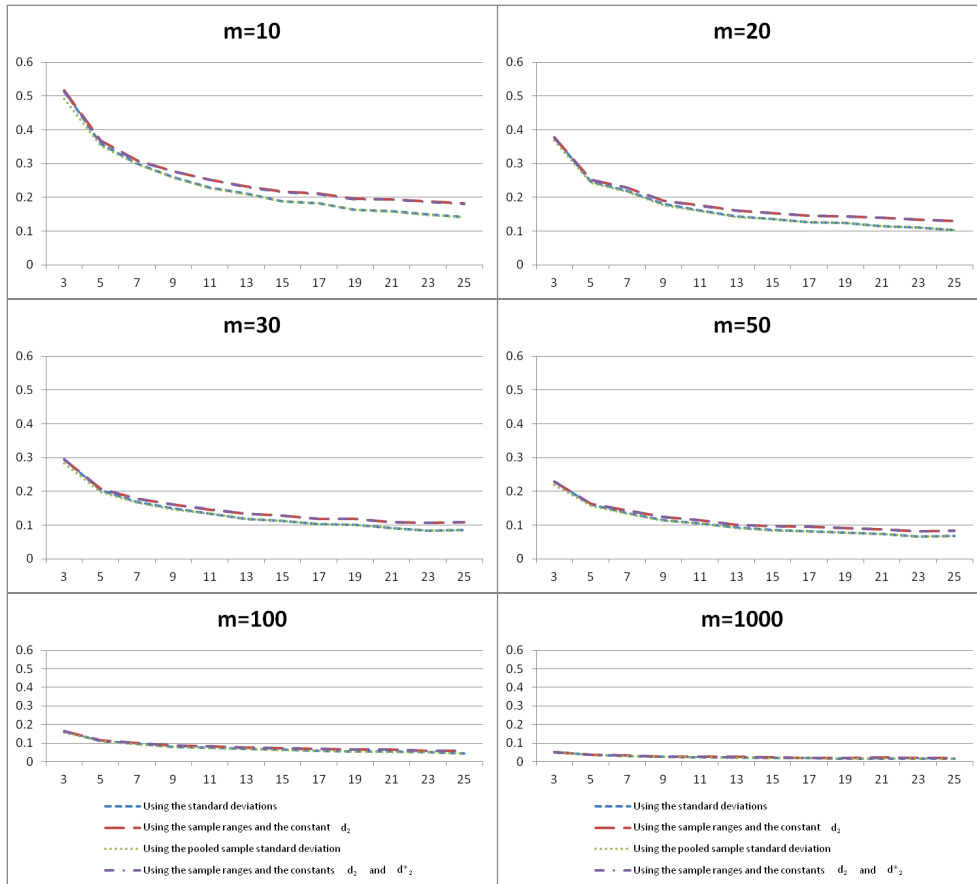
Figure 12: Values of RRMSE (%) of the estimators $\widehat{\sigma}_R$ (using the sample ranges and the constant d_2), $\widehat{\sigma}_{R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{\sigma}_S$ (using the sample standard deviations) and $\widehat{\sigma}_P$ (using the pooled sample standard deviation) of $\sigma = 1$. Data are selected from the Gamma distribution.
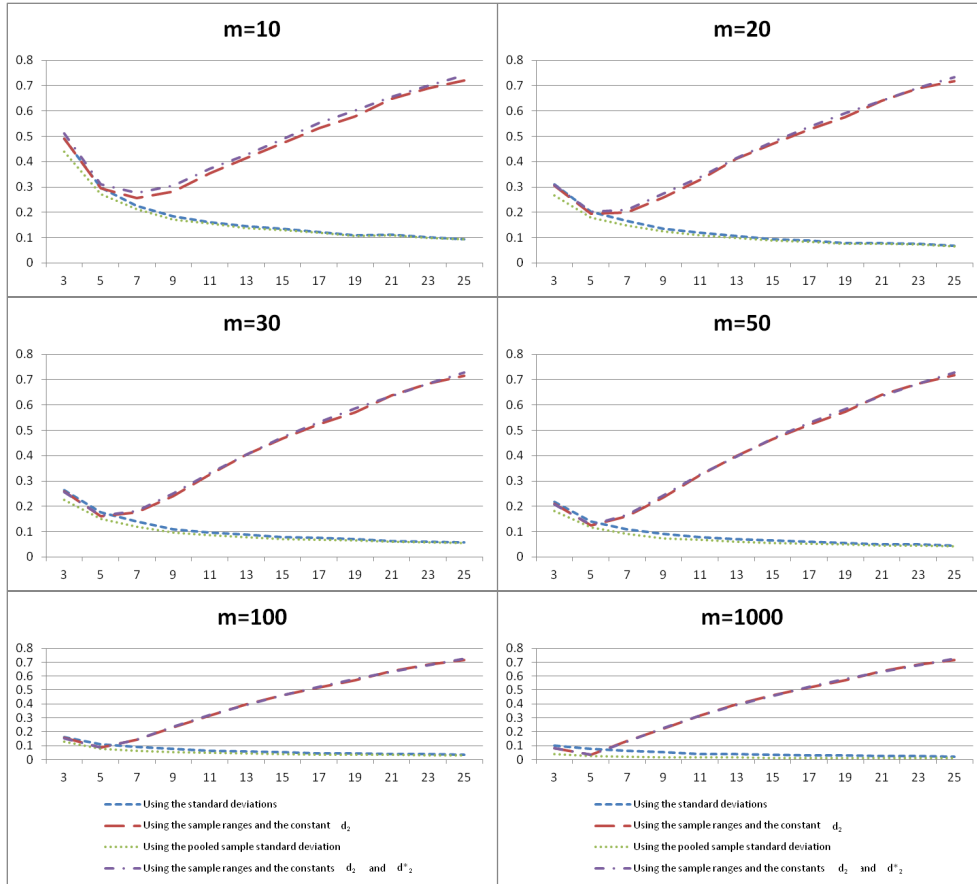
Figure 13: Values of RRMSE (%) of the estimators $\widehat{C}_{p.R}$ (using the sample ranges and the constant d_2), $\widehat{C}_{p.R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{C}_{p.S}$ (using the sample standard deviations) and $\widehat{C}_{p.P}$ (using the pooled sample standard deviation) of $C_p = 1$. Data are selected from the Uniform distribution and $\sigma = 1$.
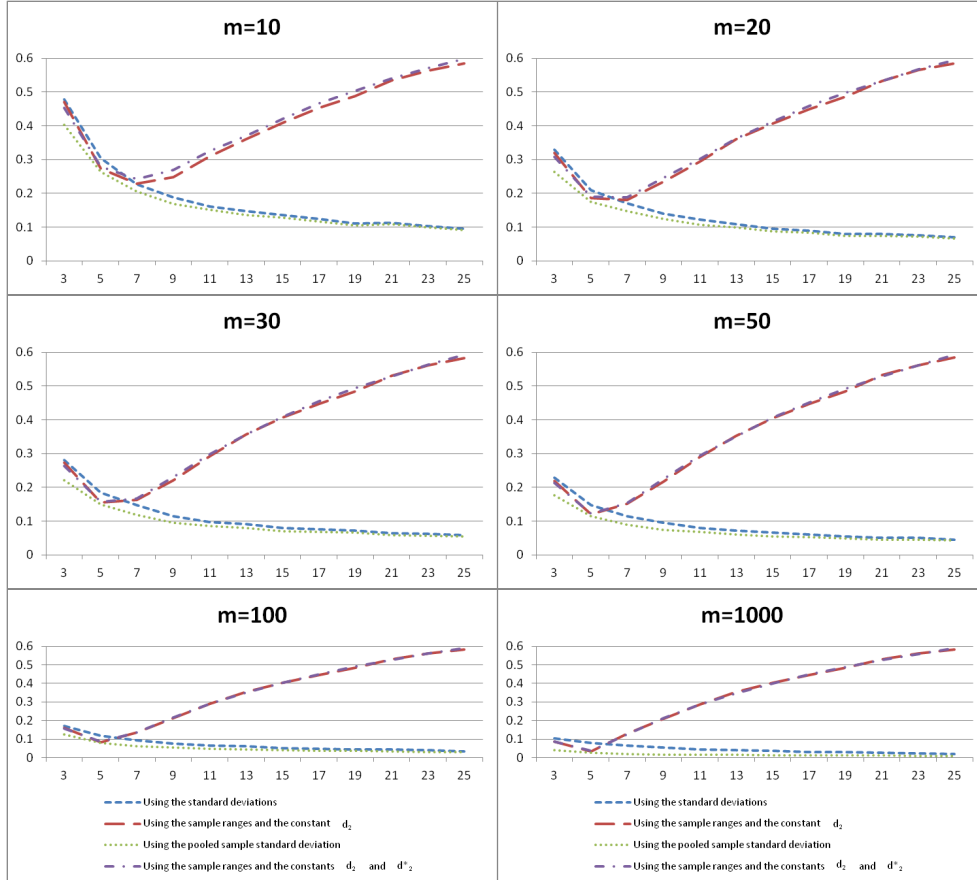
Figure 14: Values of RRMSE (%) of the estimators $\widehat{\sigma}_R$ (using the sample ranges and the constant d_2), $\widehat{\sigma}_{R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{\sigma}_S$ (using the sample standard deviations) and $\widehat{\sigma}_P$ (using the pooled sample standard deviation) of $\sigma = 1$. Data are selected from the Uniform distribution.
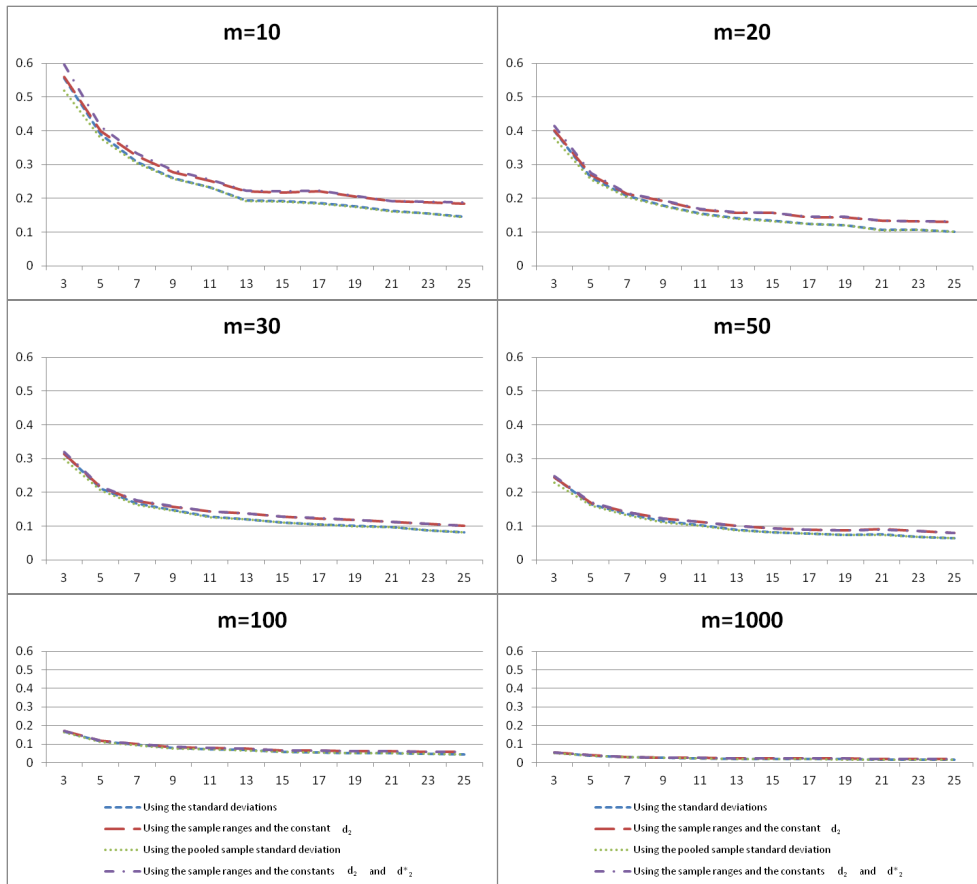
Figure 15: Values of RRMSE (%) of the estimators $\widehat{C}_{pk.R}$ (using the sample ranges and the constant d_2), $\widehat{C}_{pk.R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{C}_{pk.S}$ (using the sample standard deviations) and $\widehat{C}_{pk.P}$ (using the pooled sample standard deviation) of $C_{pk} = 1$. Data are selected from the Normal distribution, $\sigma = 1$ and the process is off-center.
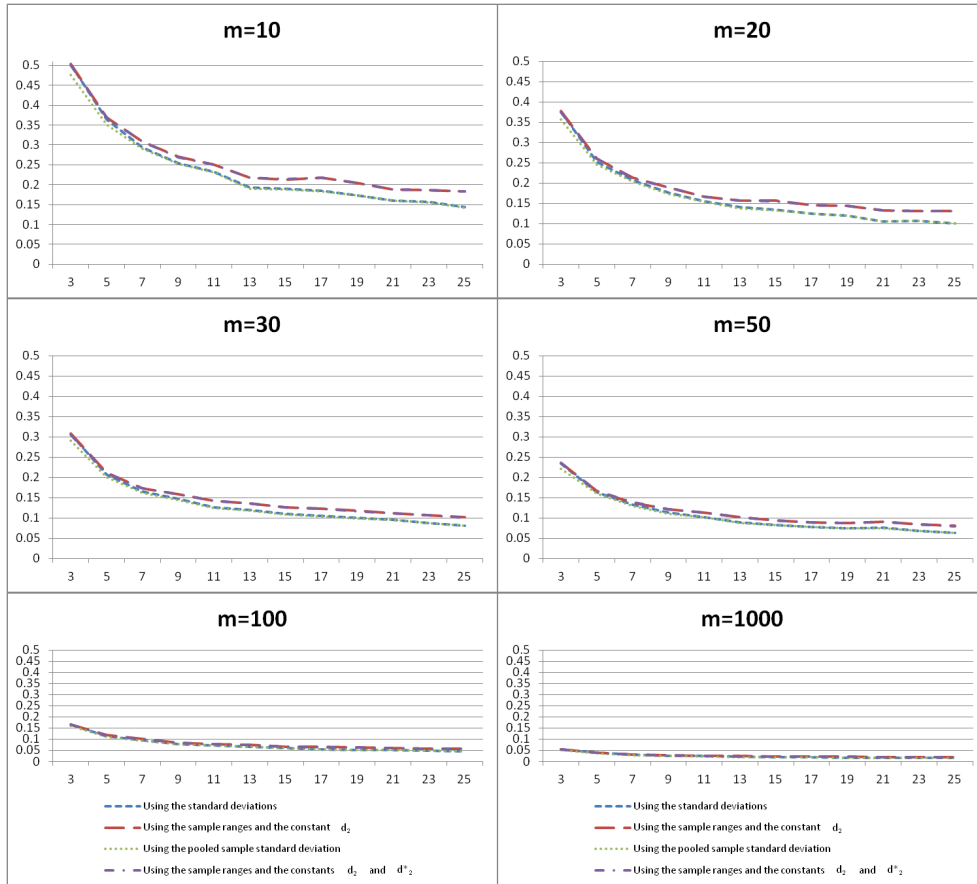
Figure 16: Values of RRMSE (%) of the estimators $\widehat{\sigma}_R$ (using the sample ranges and the constant d_2), $\widehat{\sigma}_{R2}$ (using the sample ranges and the constants d_2 and d_2^*), $\widehat{\sigma}_S$ (using the sample standard deviations) and $\widehat{\sigma}_P$ (using the pooled sample standard deviation) of $\sigma = 1$. Data are selected from the Normal distribution and the process is off-center.