

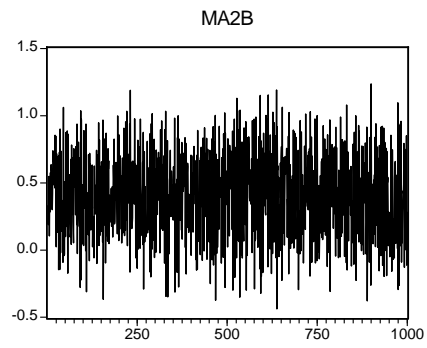
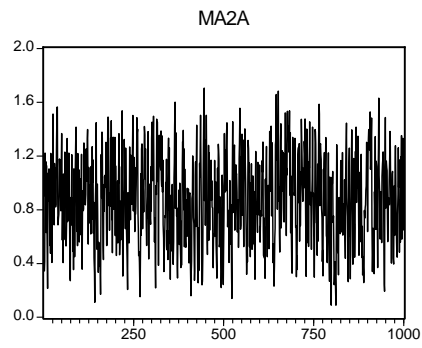
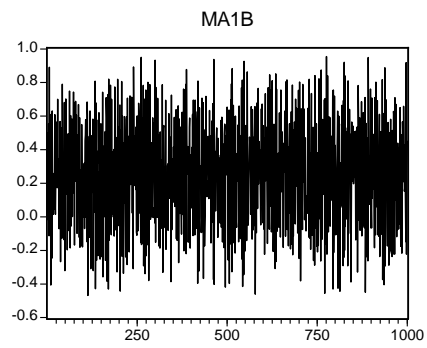
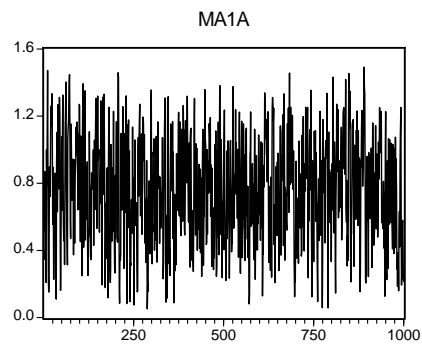
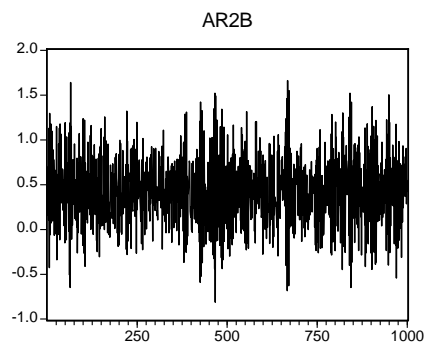
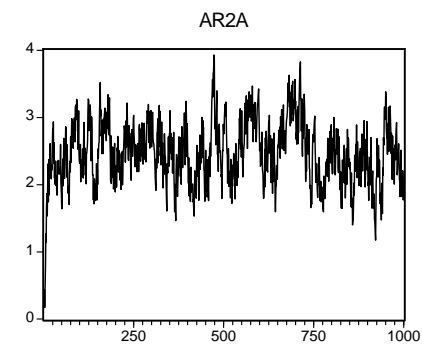
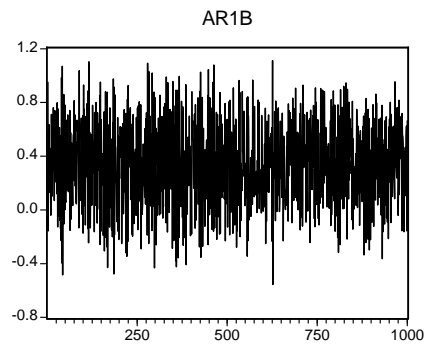
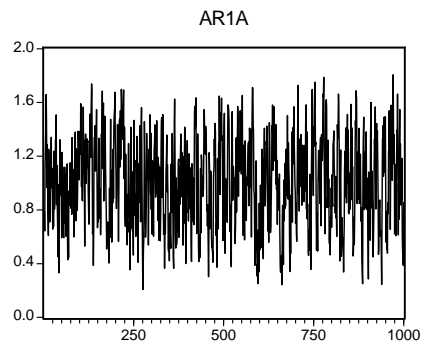
Simulations of AR and MA processes

The following pages will plot the time series and autocorrelograms for several autoregressive and moving average simulated data sets. Specifically, we simulate the following

1. AR(1)a: $y_t = 0.5y_{t-1} + \varepsilon_t$
2. AR(1)b: $y_t = -0.5y_{t-1} + \varepsilon_t$
3. AR(2)a: $y_t = 0.5y_{t-1} + 0.3y_{t-2} + \varepsilon_t$
4. AR(2)b: $y_t = -0.5y_{t-1} + 0.3y_{t-2} + \varepsilon_t$
5. MA(1)a: $y_t = \varepsilon_t + 0.5\varepsilon_{t-1}$
6. MA(1)b: $y_t = \varepsilon_t - 0.5\varepsilon_{t-1}$
7. MA(2)a: $y_t = \varepsilon_t + 0.5\varepsilon_{t-1} + 0.3\varepsilon_{t-2}$
8. MA(2)a: $y_t = \varepsilon_t - 0.5\varepsilon_{t-1} + 0.3\varepsilon_{t-2}$

We note that the theoretical ACF should have spikes equal to

1. AR(1)a: $\rho_j = \phi\rho_{j-1}$, $\rho_1 = 0.5$, $\rho_2 = 0.5 \times 0.5 = 0.25$, $\rho_3 = 0.5 \times 0.25 = 0.125$, ...
2. AR(1)b: $\rho_j = \phi\rho_{j-1}$, $\rho_1 = -0.5$, $\rho_2 = -0.5 \times -0.5 = 0.25$, $\rho_3 = -0.5 \times 0.25 = -0.125$, ...
3. AR(2)a: $\rho_1 = \frac{\phi_1}{(1-\phi_2)} = \frac{0.5}{(1-0.3)} \approx 0.714$, $\rho_2 = \phi_1\rho_1 + \phi_2\rho_0 \approx 0.5 \times 0.714 + 0.3 \approx 0.657$, ...
4. AR(2)b: $\rho_1 = \frac{\phi_1}{(1-\phi_2)} = \frac{-0.5}{(1-0.3)} \approx -0.714$, $\rho_2 = \phi_1\rho_1 + \phi_2\rho_0 \approx 0.5 \times (-0.714) + 0.3 \approx 0.057$, ...
5. MA(1)a: $\rho_1 = \frac{\theta}{(1+\theta^2)} = \frac{0.5}{(1+0.25)} = 0.4$, $\rho_j = 0 \forall j > 1$
6. MA(1)b: $\rho_1 = \frac{\theta}{(1+\theta^2)} = \frac{-0.5}{(1+0.25)} = -0.4$, $\rho_j = 0 \forall j > 1$
7. MA(2)a: $\rho_1 = \frac{\theta_1+\theta_1\theta_2}{(1+\theta_1^2+\theta_2^2)} = \frac{0.5+0.15}{(1+0.25+0.09)} \approx 0.485$, $\rho_2 = \frac{\theta_2}{(1+\theta_1^2+\theta_2^2)} = \frac{0.3}{(1+0.25+0.09)} \approx 0.224$, $\rho_j = 0 \forall j > 2$
8. MA(2)a: $\rho_1 = \frac{\theta_1+\theta_1\theta_2}{(1+\theta_1^2+\theta_2^2)} = \frac{-0.5+0.15}{(1+0.25+0.09)} \approx -0.261$, $\rho_2 = \frac{\theta_2}{(1+\theta_1^2+\theta_2^2)} = \frac{0.3}{(1+0.25+0.09)} \approx 0.224$, $\rho_j = 0 \forall j > 2$



Correlogram of AR1A

Date: 02/18/10 Time: 14:32
 Sample: 1 1000
 Included observations: 999

| Autocorrelation | Partial Correlation | AC | PAC | Q-Stat | Prob | |
|-----------------|---------------------|----|--------|--------|--------|-------|
| | | 1 | 0.534 | 0.534 | 285.75 | 0.000 |
| | | 2 | 0.293 | 0.011 | 371.83 | 0.000 |
| | | 3 | 0.151 | -0.013 | 394.76 | 0.000 |
| | | 4 | 0.074 | -0.005 | 400.30 | 0.000 |
| | | 5 | 0.025 | -0.016 | 400.91 | 0.000 |
| | | 6 | 0.020 | 0.021 | 401.32 | 0.000 |
| | | 7 | -0.002 | -0.023 | 401.33 | 0.000 |
| | | 8 | -0.001 | 0.009 | 401.33 | 0.000 |
| | | 9 | -0.022 | -0.029 | 401.82 | 0.000 |
| | | 10 | -0.064 | -0.058 | 405.92 | 0.000 |
| | | 11 | -0.079 | -0.023 | 412.19 | 0.000 |
| | | 12 | -0.004 | 0.088 | 412.21 | 0.000 |
| | | 13 | -0.000 | -0.024 | 412.21 | 0.000 |
| | | 14 | -0.024 | -0.039 | 412.77 | 0.000 |
| | | 15 | -0.026 | -0.001 | 413.44 | 0.000 |
| | | 16 | -0.044 | -0.032 | 415.41 | 0.000 |
| | | 17 | -0.051 | -0.013 | 418.07 | 0.000 |
| | | 18 | -0.062 | -0.032 | 422.04 | 0.000 |
| | | 19 | -0.045 | 0.012 | 424.13 | 0.000 |
| | | 20 | -0.015 | 0.018 | 424.36 | 0.000 |
| | | 21 | 0.007 | 0.005 | 424.40 | 0.000 |
| | | 22 | 0.058 | 0.073 | 427.91 | 0.000 |
| | | 23 | 0.057 | 0.002 | 431.19 | 0.000 |
| | | 24 | 0.050 | -0.002 | 433.71 | 0.000 |
| | | 25 | 0.020 | -0.028 | 434.12 | 0.000 |
| | | 26 | -0.003 | -0.013 | 434.13 | 0.000 |
| | | 27 | -0.008 | 0.000 | 434.20 | 0.000 |
| | | 28 | 0.022 | 0.038 | 434.71 | 0.000 |
| | | 29 | 0.017 | -0.013 | 435.00 | 0.000 |
| | | 30 | 0.003 | -0.011 | 435.02 | 0.000 |
| | | 31 | -0.027 | -0.034 | 435.76 | 0.000 |
| | | 32 | -0.044 | -0.019 | 437.75 | 0.000 |
| | | 33 | -0.036 | 0.018 | 439.10 | 0.000 |
| | | 34 | -0.055 | -0.052 | 442.23 | 0.000 |
| | | 35 | -0.033 | 0.017 | 443.38 | 0.000 |
| | | 36 | -0.007 | 0.014 | 443.42 | 0.000 |

Correlogram of AR1B

Date: 02/18/10 Time: 14:32
 Sample: 1 1000
 Included observations: 999

| Autocorrelation | Partial Correlation | AC | PAC | Q-Stat | Prob |
|-----------------|---------------------|-----------|--------|--------|-------|
| | | 1 -0.476 | -0.476 | 226.68 | 0.000 |
| | | 2 0.234 | 0.010 | 281.55 | 0.000 |
| | | 3 -0.110 | 0.006 | 293.77 | 0.000 |
| | | 4 0.045 | -0.009 | 295.83 | 0.000 |
| | | 5 -0.020 | -0.003 | 296.24 | 0.000 |
| | | 6 -0.014 | -0.029 | 296.43 | 0.000 |
| | | 7 0.055 | 0.049 | 299.51 | 0.000 |
| | | 8 -0.075 | -0.034 | 305.26 | 0.000 |
| | | 9 0.045 | -0.019 | 307.30 | 0.000 |
| | | 10 0.006 | 0.042 | 307.34 | 0.000 |
| | | 11 -0.039 | -0.029 | 308.86 | 0.000 |
| | | 12 0.071 | 0.046 | 313.96 | 0.000 |
| | | 13 -0.100 | -0.053 | 324.06 | 0.000 |
| | | 14 0.082 | 0.001 | 330.88 | 0.000 |
| | | 15 -0.060 | 0.000 | 334.53 | 0.000 |
| | | 16 0.027 | -0.018 | 335.28 | 0.000 |
| | | 17 -0.009 | 0.002 | 335.36 | 0.000 |
| | | 18 0.032 | 0.044 | 336.39 | 0.000 |
| | | 19 -0.072 | -0.067 | 341.70 | 0.000 |
| | | 20 0.010 | -0.057 | 341.80 | 0.000 |
| | | 21 -0.025 | -0.047 | 342.44 | 0.000 |
| | | 22 0.050 | 0.041 | 345.00 | 0.000 |
| | | 23 -0.070 | -0.031 | 349.96 | 0.000 |
| | | 24 0.032 | -0.041 | 351.02 | 0.000 |
| | | 25 0.005 | 0.031 | 351.04 | 0.000 |
| | | 26 -0.022 | -0.011 | 351.54 | 0.000 |
| | | 27 0.066 | 0.058 | 356.00 | 0.000 |
| | | 28 -0.005 | 0.065 | 356.02 | 0.000 |
| | | 29 -0.005 | 0.002 | 356.05 | 0.000 |
| | | 30 0.014 | 0.019 | 356.24 | 0.000 |
| | | 31 -0.023 | -0.011 | 356.78 | 0.000 |
| | | 32 0.000 | -0.035 | 356.78 | 0.000 |
| | | 33 -0.031 | -0.036 | 357.78 | 0.000 |
| | | 34 0.038 | -0.003 | 359.28 | 0.000 |
| | | 35 -0.030 | 0.007 | 360.20 | 0.000 |
| | | 36 0.032 | 0.013 | 361.23 | 0.000 |









































































Correlogram of AR2A

Date: 02/18/10 Time: 14:33
 Sample: 1 1000
 Included observations: 999

| Autocorrelation | Partial Correlation | AC | PAC | Q-Stat | Prob | |
|-----------------|---------------------|----|-------|--------|--------|-------|
| | | 1 | 0.757 | 0.757 | 573.69 | 0.000 |
| | | 2 | 0.683 | 0.258 | 1041.6 | 0.000 |
| | | 3 | 0.585 | 0.014 | 1384.6 | 0.000 |
| | | 4 | 0.529 | 0.055 | 1666.3 | 0.000 |
| | | 5 | 0.473 | 0.024 | 1891.6 | 0.000 |
| | | 6 | 0.418 | -0.011 | 2067.3 | 0.000 |
| | | 7 | 0.362 | -0.022 | 2199.5 | 0.000 |
| | | 8 | 0.334 | 0.040 | 2312.4 | 0.000 |
| | | 9 | 0.270 | -0.069 | 2386.0 | 0.000 |
| | | 10 | 0.252 | 0.036 | 2450.4 | 0.000 |
| | | 11 | 0.222 | 0.015 | 2500.5 | 0.000 |
| | | 12 | 0.206 | 0.011 | 2543.3 | 0.000 |
| | | 13 | 0.204 | 0.052 | 2585.4 | 0.000 |
| | | 14 | 0.184 | -0.009 | 2619.8 | 0.000 |
| | | 15 | 0.171 | -0.002 | 2649.5 | 0.000 |
| | | 16 | 0.159 | 0.003 | 2675.1 | 0.000 |
| | | 17 | 0.142 | -0.006 | 2695.7 | 0.000 |
| | | 18 | 0.138 | 0.009 | 2715.1 | 0.000 |
| | | 19 | 0.122 | -0.010 | 2730.2 | 0.000 |
| | | 20 | 0.115 | 0.008 | 2743.8 | 0.000 |
| | | 21 | 0.099 | -0.019 | 2753.8 | 0.000 |
| | | 22 | 0.092 | 0.009 | 2762.4 | 0.000 |
| | | 23 | 0.072 | -0.025 | 2767.8 | 0.000 |
| | | 24 | 0.079 | 0.038 | 2774.1 | 0.000 |
| | | 25 | 0.071 | 0.006 | 2779.3 | 0.000 |
| | | 26 | 0.100 | 0.073 | 2789.6 | 0.000 |
| | | 27 | 0.090 | -0.016 | 2797.8 | 0.000 |
| | | 28 | 0.100 | 0.014 | 2808.1 | 0.000 |
| | | 29 | 0.097 | 0.006 | 2817.9 | 0.000 |
| | | 30 | 0.106 | 0.016 | 2829.6 | 0.000 |
| | | 31 | 0.108 | 0.011 | 2841.7 | 0.000 |
| | | 32 | 0.103 | -0.020 | 2852.7 | 0.000 |
| | | 33 | 0.103 | 0.014 | 2863.8 | 0.000 |
| | | 34 | 0.115 | 0.031 | 2877.6 | 0.000 |
| | | 35 | 0.073 | -0.094 | 2883.1 | 0.000 |
| | | 36 | 0.070 | 0.004 | 2888.2 | 0.000 |

Correlogram of AR2B

Date: 02/18/10 Time: 15:03
 Sample: 1 1000
 Included observations: 999

| Autocorrelation | Partial Correlation | AC | PAC | Q-Stat | Prob |
|---|---|-----------|--------|--------|-------|
|  |  | 1 -0.681 | -0.681 | 464.51 | 0.000 |
|  |  | 2 0.615 | 0.282 | 843.39 | 0.000 |
|  |  | 3 -0.524 | -0.064 | 1118.9 | 0.000 |
|  |  | 4 0.451 | 0.013 | 1322.9 | 0.000 |
|  |  | 5 -0.397 | -0.022 | 1481.2 | 0.000 |
|  |  | 6 0.344 | 0.005 | 1600.0 | 0.000 |
|  |  | 7 -0.280 | 0.037 | 1679.3 | 0.000 |
|  |  | 8 0.211 | -0.064 | 1724.3 | 0.000 |
|  |  | 9 -0.178 | -0.006 | 1756.3 | 0.000 |
|  |  | 10 0.154 | 0.027 | 1780.1 | 0.000 |
|  |  | 11 -0.133 | -0.016 | 1798.1 | 0.000 |
|  |  | 12 0.102 | -0.022 | 1808.6 | 0.000 |
|  |  | 13 -0.102 | -0.037 | 1819.3 | 0.000 |
|  |  | 14 0.097 | 0.030 | 1828.9 | 0.000 |
|  |  | 15 -0.104 | -0.033 | 1839.9 | 0.000 |
|  |  | 16 0.069 | -0.062 | 1844.7 | 0.000 |
|  |  | 17 -0.070 | -0.004 | 1849.7 | 0.000 |
|  |  | 18 0.065 | 0.017 | 1854.0 | 0.000 |
|  |  | 19 -0.067 | -0.018 | 1858.6 | 0.000 |
|  |  | 20 0.058 | -0.016 | 1862.1 | 0.000 |
|  |  | 21 -0.048 | 0.014 | 1864.4 | 0.000 |
|  |  | 22 0.051 | 0.025 | 1867.1 | 0.000 |
|  |  | 23 -0.036 | 0.009 | 1868.4 | 0.000 |
|  |  | 24 0.030 | -0.018 | 1869.3 | 0.000 |
|  |  | 25 -0.034 | -0.017 | 1870.5 | 0.000 |
|  |  | 26 0.042 | 0.032 | 1872.4 | 0.000 |
|  |  | 27 -0.046 | -0.020 | 1874.6 | 0.000 |
|  |  | 28 0.042 | -0.016 | 1876.4 | 0.000 |
|  |  | 29 -0.046 | -0.004 | 1878.6 | 0.000 |
|  |  | 30 0.017 | -0.051 | 1878.8 | 0.000 |
|  |  | 31 -0.038 | -0.048 | 1880.4 | 0.000 |
|  |  | 32 0.039 | 0.011 | 1882.0 | 0.000 |
|  |  | 33 -0.039 | 0.005 | 1883.6 | 0.000 |
|  |  | 34 0.028 | -0.020 | 1884.4 | 0.000 |
|  |  | 35 -0.004 | 0.040 | 1884.4 | 0.000 |
|  |  | 36 0.004 | 0.008 | 1884.5 | 0.000 |

Correlogram of MA1A

Date: 02/18/10 Time: 14:34
 Sample: 1 1000
 Included observations: 999

| Autocorrelation | Partial Correlation | AC | PAC | Q-Stat | Prob | |
|-----------------|---------------------|----|--------|--------|--------|-------|
| | | 1 | 0.391 | 0.391 | 152.95 | 0.000 |
| | | 2 | 0.008 | -0.171 | 153.01 | 0.000 |
| | | 3 | -0.021 | 0.052 | 153.44 | 0.000 |
| | | 4 | -0.046 | -0.067 | 155.54 | 0.000 |
| | | 5 | -0.010 | 0.040 | 155.63 | 0.000 |
| | | 6 | -0.018 | -0.044 | 155.96 | 0.000 |
| | | 7 | -0.019 | 0.008 | 156.32 | 0.000 |
| | | 8 | 0.038 | 0.046 | 157.75 | 0.000 |
| | | 9 | 0.017 | -0.025 | 158.04 | 0.000 |
| | | 10 | -0.031 | -0.029 | 159.05 | 0.000 |
| | | 11 | 0.010 | 0.044 | 159.14 | 0.000 |
| | | 12 | 0.030 | 0.007 | 160.03 | 0.000 |
| | | 13 | -0.007 | -0.027 | 160.08 | 0.000 |
| | | 14 | 0.013 | 0.035 | 160.24 | 0.000 |
| | | 15 | -0.047 | -0.080 | 162.53 | 0.000 |
| | | 16 | -0.018 | 0.047 | 162.85 | 0.000 |
| | | 17 | 0.045 | 0.026 | 164.88 | 0.000 |
| | | 18 | 0.045 | 0.027 | 166.92 | 0.000 |
| | | 19 | 0.049 | 0.023 | 169.36 | 0.000 |
| | | 20 | 0.027 | -0.002 | 170.09 | 0.000 |
| | | 21 | 0.005 | 0.009 | 170.12 | 0.000 |
| | | 22 | -0.023 | -0.035 | 170.67 | 0.000 |
| | | 23 | -0.023 | 0.009 | 171.22 | 0.000 |
| | | 24 | 0.024 | 0.040 | 171.79 | 0.000 |
| | | 25 | 0.017 | -0.022 | 172.10 | 0.000 |
| | | 26 | -0.020 | -0.023 | 172.51 | 0.000 |
| | | 27 | -0.038 | -0.016 | 174.03 | 0.000 |
| | | 28 | -0.015 | 0.004 | 174.25 | 0.000 |
| | | 29 | 0.026 | 0.032 | 174.93 | 0.000 |
| | | 30 | 0.036 | 0.010 | 176.30 | 0.000 |
| | | 31 | -0.004 | -0.027 | 176.32 | 0.000 |
| | | 32 | 0.006 | 0.028 | 176.35 | 0.000 |
| | | 33 | -0.002 | -0.024 | 176.35 | 0.000 |
| | | 34 | -0.050 | -0.036 | 178.94 | 0.000 |
| | | 35 | -0.080 | -0.056 | 185.55 | 0.000 |
| | | 36 | -0.026 | 0.030 | 186.25 | 0.000 |

Correlogram of MA1B

Date: 02/18/10 Time: 14:34
 Sample: 1 1000
 Included observations: 999

| Autocorrelation | Partial Correlation | AC | PAC | Q-Stat | Prob |
|-----------------|---------------------|-----------|--------|--------|-------|
| | | 1 -0.399 | -0.399 | 159.32 | 0.000 |
| | | 2 -0.035 | -0.231 | 160.57 | 0.000 |
| | | 3 0.014 | -0.119 | 160.78 | 0.000 |
| | | 4 0.028 | -0.029 | 161.56 | 0.000 |
| | | 5 -0.052 | -0.062 | 164.23 | 0.000 |
| | | 6 0.051 | 0.010 | 166.86 | 0.000 |
| | | 7 0.018 | 0.046 | 167.19 | 0.000 |
| | | 8 -0.081 | -0.054 | 173.79 | 0.000 |
| | | 9 0.039 | -0.016 | 175.33 | 0.000 |
| | | 10 -0.004 | -0.018 | 175.34 | 0.000 |
| | | 11 0.012 | 0.008 | 175.48 | 0.000 |
| | | 12 -0.028 | -0.020 | 176.25 | 0.000 |
| | | 13 0.014 | -0.014 | 176.46 | 0.000 |
| | | 14 -0.046 | -0.060 | 178.65 | 0.000 |
| | | 15 0.065 | 0.025 | 183.00 | 0.000 |
| | | 16 -0.040 | -0.017 | 184.61 | 0.000 |
| | | 17 0.028 | 0.019 | 185.43 | 0.000 |
| | | 18 -0.069 | -0.065 | 190.21 | 0.000 |
| | | 19 0.062 | 0.007 | 194.12 | 0.000 |
| | | 20 -0.061 | -0.056 | 197.90 | 0.000 |
| | | 21 0.066 | 0.025 | 202.37 | 0.000 |
| | | 22 -0.040 | -0.017 | 203.97 | 0.000 |
| | | 23 -0.024 | -0.044 | 204.54 | 0.000 |
| | | 24 0.034 | -0.001 | 205.70 | 0.000 |
| | | 25 0.031 | 0.046 | 206.66 | 0.000 |
| | | 26 -0.088 | -0.071 | 214.65 | 0.000 |
| | | 27 0.027 | -0.037 | 215.42 | 0.000 |
| | | 28 0.027 | -0.011 | 216.19 | 0.000 |
| | | 29 -0.010 | 0.016 | 216.30 | 0.000 |
| | | 30 -0.055 | -0.073 | 219.43 | 0.000 |
| | | 31 0.091 | 0.039 | 228.05 | 0.000 |
| | | 32 -0.058 | -0.022 | 231.47 | 0.000 |
| | | 33 -0.023 | -0.029 | 232.00 | 0.000 |
| | | 34 0.059 | 0.009 | 235.61 | 0.000 |
| | | 35 -0.015 | 0.015 | 235.83 | 0.000 |
| | | 36 -0.008 | -0.001 | 235.91 | 0.000 |

Correlogram of MA2A

Date: 02/18/10 Time: 14:35
 Sample: 1 1000
 Included observations: 999

| Autocorrelation | Partial Correlation | AC | PAC | Q-Stat | Prob | |
|-----------------|---------------------|----|--------|--------|--------|-------|
| | | 1 | 0.437 | 0.437 | 191.37 | 0.000 |
| | | 2 | 0.204 | 0.017 | 233.27 | 0.000 |
| | | 3 | -0.054 | -0.185 | 236.22 | 0.000 |
| | | 4 | -0.043 | 0.053 | 238.08 | 0.000 |
| | | 5 | -0.084 | -0.053 | 245.24 | 0.000 |
| | | 6 | -0.041 | -0.005 | 246.95 | 0.000 |
| | | 7 | -0.012 | 0.026 | 247.10 | 0.000 |
| | | 8 | 0.050 | 0.044 | 249.62 | 0.000 |
| | | 9 | 0.022 | -0.032 | 250.10 | 0.000 |
| | | 10 | 0.081 | 0.085 | 256.76 | 0.000 |
| | | 11 | 0.054 | 0.005 | 259.70 | 0.000 |
| | | 12 | 0.063 | 0.016 | 263.69 | 0.000 |
| | | 13 | -0.003 | -0.024 | 263.69 | 0.000 |
| | | 14 | 0.032 | 0.052 | 264.72 | 0.000 |
| | | 15 | -0.019 | -0.039 | 265.09 | 0.000 |
| | | 16 | 0.000 | 0.009 | 265.09 | 0.000 |
| | | 17 | -0.024 | -0.004 | 265.68 | 0.000 |
| | | 18 | 0.000 | -0.004 | 265.68 | 0.000 |
| | | 19 | -0.011 | -0.005 | 265.82 | 0.000 |
| | | 20 | 0.038 | 0.045 | 267.32 | 0.000 |
| | | 21 | -0.000 | -0.040 | 267.32 | 0.000 |
| | | 22 | 0.022 | 0.013 | 267.82 | 0.000 |
| | | 23 | 0.075 | 0.109 | 273.51 | 0.000 |
| | | 24 | 0.105 | 0.024 | 284.72 | 0.000 |
| | | 25 | 0.090 | 0.023 | 293.02 | 0.000 |
| | | 26 | 0.016 | -0.040 | 293.29 | 0.000 |
| | | 27 | -0.004 | 0.020 | 293.31 | 0.000 |
| | | 28 | -0.033 | -0.025 | 294.42 | 0.000 |
| | | 29 | -0.019 | 0.021 | 294.81 | 0.000 |
| | | 30 | -0.001 | 0.009 | 294.81 | 0.000 |
| | | 31 | -0.005 | -0.030 | 294.84 | 0.000 |
| | | 32 | 0.009 | 0.012 | 294.91 | 0.000 |
| | | 33 | 0.036 | 0.039 | 296.22 | 0.000 |
| | | 34 | 0.021 | -0.037 | 296.68 | 0.000 |
| | | 35 | -0.016 | -0.043 | 296.95 | 0.000 |
| | | 36 | -0.070 | -0.045 | 302.01 | 0.000 |

Correlogram of MA2B

Date: 02/18/10 Time: 14:35
 Sample: 1 1000
 Included observations: 999

| Autocorrelation | Partial Correlation | AC | PAC | Q-Stat | Prob |
|-----------------|---------------------|-----------|--------|--------|-------|
| | | 1 -0.508 | -0.508 | 258.25 | 0.000 |
| | | 2 0.252 | -0.008 | 321.75 | 0.000 |
| | | 3 -0.053 | 0.097 | 324.56 | 0.000 |
| | | 4 0.046 | 0.078 | 326.66 | 0.000 |
| | | 5 -0.001 | 0.041 | 326.66 | 0.000 |
| | | 6 -0.030 | -0.040 | 327.58 | 0.000 |
| | | 7 0.037 | -0.007 | 328.97 | 0.000 |
| | | 8 -0.020 | 0.006 | 329.36 | 0.000 |
| | | 9 -0.010 | -0.022 | 329.45 | 0.000 |
| | | 10 0.045 | 0.042 | 331.51 | 0.000 |
| | | 11 -0.054 | -0.013 | 334.48 | 0.000 |
| | | 12 0.048 | 0.005 | 336.77 | 0.000 |
| | | 13 0.007 | 0.051 | 336.81 | 0.000 |
| | | 14 -0.007 | 0.017 | 336.87 | 0.000 |
| | | 15 0.003 | -0.010 | 336.87 | 0.000 |
| | | 16 -0.023 | -0.041 | 337.43 | 0.000 |
| | | 17 0.011 | -0.029 | 337.55 | 0.000 |
| | | 18 -0.023 | -0.020 | 338.08 | 0.000 |
| | | 19 -0.003 | -0.018 | 338.09 | 0.000 |
| | | 20 -0.020 | -0.034 | 338.50 | 0.000 |
| | | 21 0.010 | -0.004 | 338.61 | 0.000 |
| | | 22 -0.022 | -0.015 | 339.09 | 0.000 |
| | | 23 0.040 | 0.038 | 340.72 | 0.000 |
| | | 24 -0.067 | -0.036 | 345.27 | 0.000 |
| | | 25 0.041 | -0.025 | 346.96 | 0.000 |
| | | 26 -0.052 | -0.046 | 349.70 | 0.000 |
| | | 27 0.054 | 0.023 | 352.66 | 0.000 |
| | | 28 -0.013 | 0.054 | 352.84 | 0.000 |
| | | 29 -0.012 | 0.004 | 352.98 | 0.000 |
| | | 30 0.005 | -0.020 | 353.01 | 0.000 |
| | | 31 0.039 | 0.048 | 354.61 | 0.000 |
| | | 32 -0.065 | -0.031 | 358.99 | 0.000 |
| | | 33 0.055 | -0.000 | 362.14 | 0.000 |
| | | 34 -0.069 | -0.046 | 367.07 | 0.000 |
| | | 35 0.076 | 0.022 | 373.14 | 0.000 |
| | | 36 -0.066 | -0.003 | 377.70 | 0.000 |