

Errata for Analysis of Financial Time Series, 3rd Edition, R.S. Tsay,
August 2010, Wiley, ISBN: 978-0-470-41435-4 (cloth).

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1. Page 11, Table 1.2, daily simple returns, 3M: change “670/01/02” to “70/01/02”. That is, delete “6”.
2. Page 27, Problem 5 of Exercises, Part (d): change “long” returns to “log” returns.
3. Page 106, Exercise 2.11: change “monthly” to “weekly”.
4. Page 114, Section 3.3.1: the definition of F is

$$F = \frac{SSR_0 - SSR_1}{SSR_1 / (T - 2m - 1)}$$

5. Page 159, Table 3.4. The numbers shown are conditional variances, not volatility.

Further, we reanalyzed the data using a new R program. The results are similar. We give the new results below just for reference. For Eq. (3.46), the new result is

$$r_t = 0.586 + a_t, \quad a_t = \sigma_t \epsilon_t, \quad \sigma_t^2 = 0.736 + 0.152a_{t-2}^2 + 0.833\sigma_{t-1}^2.$$

Eq. (3.47) becomes

$$\begin{aligned} r_t &= 0.702 + a_t, \quad a_t = \sigma_t \epsilon_t, \\ \sigma_t^2 &= 1.607 + 0.190a_{t-2}^2 + 0.787\sigma_{t-1}^2 - 0.010(x_{t-1} - 1.24)^2. \end{aligned}$$

All estimates are statistically significant at the 5% level. With these new estimates and using `volatility`, Table 3.4 becomes

| Month | 7/99 | 8/99 | 9/99 | 10/99 | 11/99 | 12/99 |
|--------------|------|------|------|-------|-------|-------|
| Model (3.46) | 5.10 | 5.08 | 4.95 | 4.62 | 4.52 | 4.72 |
| Model (3.47) | 4.64 | 4.74 | 4.71 | 4.39 | 3.81 | 4.28 |

6. Page 161, Table 3.12: The label for y-axis should be **volatility**, not volume.
7. Page 207, line 4, change $m-p-q$ to m . Also, delete the sentence “Because the statistic ... is $m-p-q$ ”.
8. Page 252, first equation: change $\lambda_{u,i}$ to $\ln\left(\frac{\lambda_{u,i}}{1-\lambda_{u,i}}\right)$.
9. Page 268, Example 5.5. Change 194 price changes to 195 price changes.

10. Page 272, Table 5.9. The estimates of α and κ for the GACD model are not stable. The results suggest that generalized Gamma innovations are not needed. One can take a log transformation and model the resulting time series.
11. Page 343, line 1 above Equation (7.16). Change **minimum** to **maximum**.
12. Page 398, line -8. The $Q_2(\cdot)$ statistics are $Q_2(1) = 10.90$, $Q_2(5) = 54.21$, and $Q_2(10) = 75.46$.
13. Page 398, line -6, the p values are 0.028, 0.0001, and 0.0001, respectively.
14. Page 422, Table 8.6, case (b). Change the (1,2) element of Θ_1 from -0.05 to -0.15 .
15. Page 562, Theorem 11.1, RHS of Result 2. Change the second Σ_{xx} to Σ_{xy} . That is, the correct formula is

$$\text{Var}(\mathbf{x}|\mathbf{y}) = \Sigma_{xx} - \Sigma_{xy}\Sigma_{yy}^{-1}\Sigma_{yx}.$$

16. Page 639, the equation before the 2nd **Remark**: add η to the right hand side of the equation. That is, $\widehat{h}_2(-2) = \alpha_1^2(\ln h_2 - \eta) + \eta$.