Appendix 3: Parameter estimates and standard errors

Appendix 3-1. Parameter estimates from the OLS model specification

	DM	£	¥	FF	BF	IL
Conditional mean equation parameters						
C	0.024 (0.013)	0.012 (0.013)	0.027 (0.013)	0.021 (0.013)	0.026 (0.014)	0.009 (0.013)
AR(1)	0.493 (0.182)	0.740 (0.182)	0.439 (0.182)	0.557 (0.182)		
AR(3)						0.413 (0.182)
AR(6)					-0.380 (0.182)	-0.382 (0.18)
AR(8)					-0.034 (0.18)	
MA(1)					0.044 (0.018)	0.039 (0.019)
Log Likelihood Values						
Ln(L)	-3342.2	-3200.6	-3236.5	-3197.9	-3309.6	-3251.4

Appendix 3-2 Parameter estimates from the Gaussian-GARCH model specification

	DM	£	¥	FF	BF	IL
Conditional mean equation parameters						
C	0.019 (0.012)	0.017 (0.011)	0.022 (0.012)	0.018 (0.012)	0.022 (0.013)	0.015 (0.012)
AR(1)	0.576 (0.193)	0.647 (0.191)	0.445 (0.196)	0.598 (0.194)		
AR(3)						0.230 (0.195)
AR(6)					-0.285 (0.189)	-0.217 (0.190)
AR(8)					-0.353 (0.187)	
MA(1)					0.052 (0.019)	0.035 (0.020)
Conditional variance equation parameters						
w	0.019 (0.005)	0.010 (.)	0.016 (0.004)	0.021 (0.005)	0.021 (0.006)	0.031 (0.006)
α	0.069 (0.011)	0.056 (0.007)	0.060 (0.009)	0.076 (0.012)	0.071 (0.011)	0.106 (0.014)
β	0.897 (0.017)	0.924 (0.006)	0.909 (0.015)	0.881 (0.019)	0.890 (0.019)	0.835 (0.021)
Log Likelihood Value						
Ln(L)	-3228.5	-3122.0	-3059.3	-3085.9	-3201.0	-3078.2

Appendix 3-3. Parameter estimates from the GARCH-t model specification

	DM	£	¥	FF	BF	IL
Conditional mean equation parameters						
C	0.017 (0.012)	0.024 (0.011)	0.002 (0.010)	0.016 (0.011)	0.020 (0.012)	0.016 (0.011)
AR(1)	0.394 (0.183)	0.400 (0.181)	0.068 (0.177)	0.407 (0.184)		
AR(3)						0.222 (0.181)
AR(6)					-0.224 (0.180)	-0.174 (0.178)
AR(8)					-0.321 (0.178)	
MA(1)					0.035 (0.019)	0.006 (0.019)
Conditional variance equation parameters						
w	0.015 (0.005)	0.005 (0.002)	0.011 (0.004)	0.015 (0.006)	0.014 (0.005)	0.022 (0.007)
α	0.065 (0.012)	0.049 (0.011)	0.064 (0.014)	0.071 (0.013)	0.066 (0.013)	0.074 (0.014)
β	0.910 (0.018)	0.943 (0.014)	0.922 (0.019)	0.901 (0.021)	0.911 (0.019)	0.885 (0.024)
Distribution parameters						
υ	6.093 (0.673)	5.816 (0.635)	4.240 (0.351)	6.210 (0.698)	6.075 (0.680)	5.785 (0.643)
Log-Likelihood Values						
Ln(L)	-3163.5	-2991.0	-2970.2	-3024.2	-3137.1	-3005.8

Appendix 3-4. Parameter estimates from the EGARCH-t model specification

	DM	£	¥	FF	BF	IL
Conditional mean equation parameters						
C	0.018 (0.012)	0.026 (0.011)	0.002 (0.010)	0.018 (0.011)	0.020 (0.012)	0.019 (0.011)
AR(1)	0.398 (0.182)	0.406 (0.180)	0.088 (0.177)	0.393 (0.182)		
AR(3)						0.234 (0.179)
AR(6)					-0.190 (0.178)	-0.176 (0.174)
AR(8)					-0.333 (0.177)	
MA(1)					0.031 (0.019)	0.002 (0.019)
Conditional variance equation parameters						
w	0.004 (0.007)	0.010 (0.006)	0.022 (0.010)	-0.001 (0.009)	0.004 (0.008)	-0.003 (0.012)
β	0.973 (0.009)	0.984 (0.006)	0.974 (0.010)	0.967 (0.010)	0.973 (0.009)	0.953 (0.013)
θ	0.026 (0.011)	0.003 (0.011)	0.013 (0.011)	0.018 (0.012)	0.019 (0.011)	0.001 (0.014)
γ	0.138 (0.022)	0.126 (0.022)	0.154 (0.029)	0.155 (0.024)	0.142 (0.023)	0.166 (0.026)
Distribution parameters						
υ	6.164 (0.689)	5.723 (0.618)	4.254 (0.352)	6.275 (0.712)	6.170 (0.697)	5.535 (0.603)
Log Likelihood Value						
Ln(L)	-3158.2	-2989.0	-2969.5	-3018.8	-3132.0	-3006.7

Appendix 3-5. Parameter estimates from the GARCH-EGB2 model specification

	DM	£	¥	FF	BF	IL
Conditional mean equation parameters						
C	0.021 (0.012)	0.020 (0.012)	0.023 (0.012)	0.020 (0.012)	0.024 (0.013)	0.014 (0.012)
AR(1)	0.378 (0.183)	0.345 (0.183)	0.040 (0.178)	0.392 (0.184)		
AR(3)						0.218 (0.179)
AR(6)					-0.248 (0.179)	-0.189 (0.174)
AR(8)					-0.319 (0.177)	
MA(1)					0.033 (0.019)	0.006 (0.019)
Conditional variance equation parameters						
w	0.015 (0.005)	0.010 (.)	0.011 (0.004)	0.016 (0.006)	0.015 (0.006)	0.022 (0.007)
α	0.065 (0.012)	0.061 (0.010)	0.058 (0.013)	0.071 (0.014)	0.065 (0.013)	0.081 (0.016)
β	0.908 (0.018)	0.920 (0.008)	0.922 (0.018)	0.897 (0.021)	0.908 (0.020)	0.876 (0.025)
Distribution parameters						
p	0.746 (0.122)	0.596 (0.099)	0.425 (0.077)	0.775 (0.128)	0.730 (0.122)	0.538 (0.108)
q	0.698 (0.112)	0.625 (0.106)	0.351 (0.061)	0.724 (0.117)	0.690 (0.113)	0.548 (0.112)
Log Likelihood Value						
Ln(L)	-3161.3	-2987.8	-2963.7	-3022.1	-3134.8	-3002

Standard errors reported in parentheses. ( ) indicate the conventional standard error.
(.) indicates the standard error cannot be estimated because the parameter estimate lies on the boundary of the feasible parameter space.