

Table 4.3. *Parameter estimates of asymmetric GARCH models*

	SP500	DAX	FT-SE	Nikkei
GARCH(1, 1)				
ω	0.012 (0.0014)	0.037 (0.0029)	0.023 (0.0028)	0.018 (0.0019)
α_1	0.072 (0.0016)	0.115 (0.0041)	0.102 (0.0064)	0.136 (0.0031)
β_1	0.919 (0.0031)	0.868 (0.0063)	0.872 (0.0084)	0.864 (0.0040)
log-lik.	-8398.13	-9630.78	-7686.28	-9198.15
EGARCH(1, 1)				
ω	0.003 (0.0011)	0.013 (0.0010)	-0.036 (0.0069)	0.016 (0.0014)
γ	0.133 (0.0064)	0.174 (0.0061)	0.441 (0.0223)	0.244 (0.0061)
ψ	-0.077 (-0.0042)	-0.062 (-0.0043)	0.036 (0.0107)	-0.111 (-0.0046)
β_1	0.981 (0.0016)	0.974 (0.0023)	0.715 (0.0156)	0.974 (0.0020)
log-lik.	-8325.7	-9610.37	-7905.72	-9087.97
GJR(1, 1)				
ω	0.018 (0.0014)	0.041 (0.0031)	0.023 (0.0026)	0.02 (0.0019)
α_1	0.025 (0.0047)	0.053 (0.0074)	0.055 (0.0079)	0.053 (0.0051)
γ_1	0.095 (0.0052)	0.1 (0.0069)	0.069 (0.0067)	0.168 (0.0064)
β_1	0.911 (0.0038)	0.874 (0.0069)	0.882 (0.0084)	0.863 (0.0042)
log-lik.	-8343.49	-9595.55	-7664.5	-9103.32
TGARCH(1, 1)				
ω	0.019 (0.0029)	0.034 (0.0044)	0.027 (0.0039)	0.034 (0.0041)
α_1	0.029 (0.0057)	0.061 (0.0078)	0.07 (0.0086)	0.059 (0.0068)
γ_1	0.088 (0.0079)	0.074 (0.0082)	0.063 (0.0079)	0.129 (0.0098)
β_1	0.926 (0.0063)	0.897 (0.0085)	0.89 (0.0096)	0.876 (0.0082)
log-lik.	-8325.7	-9604.9	-7661.7	-9105.1