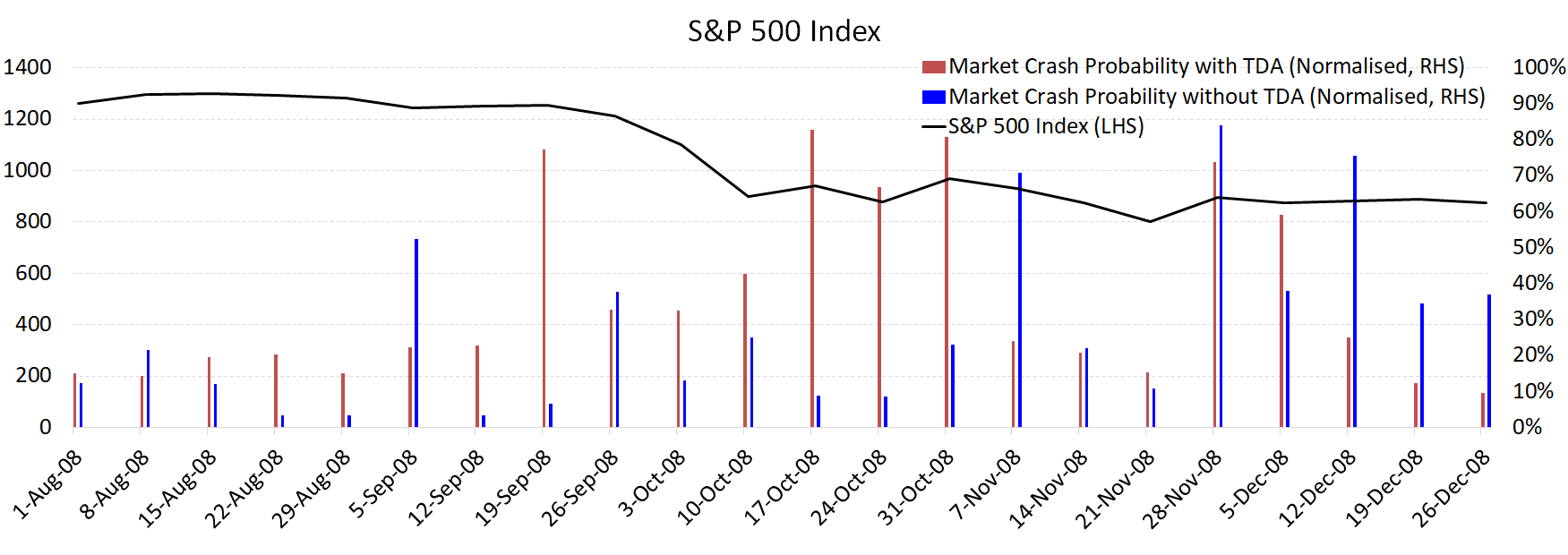
**Figures**

Figure 1: SP for 2008 and 1998



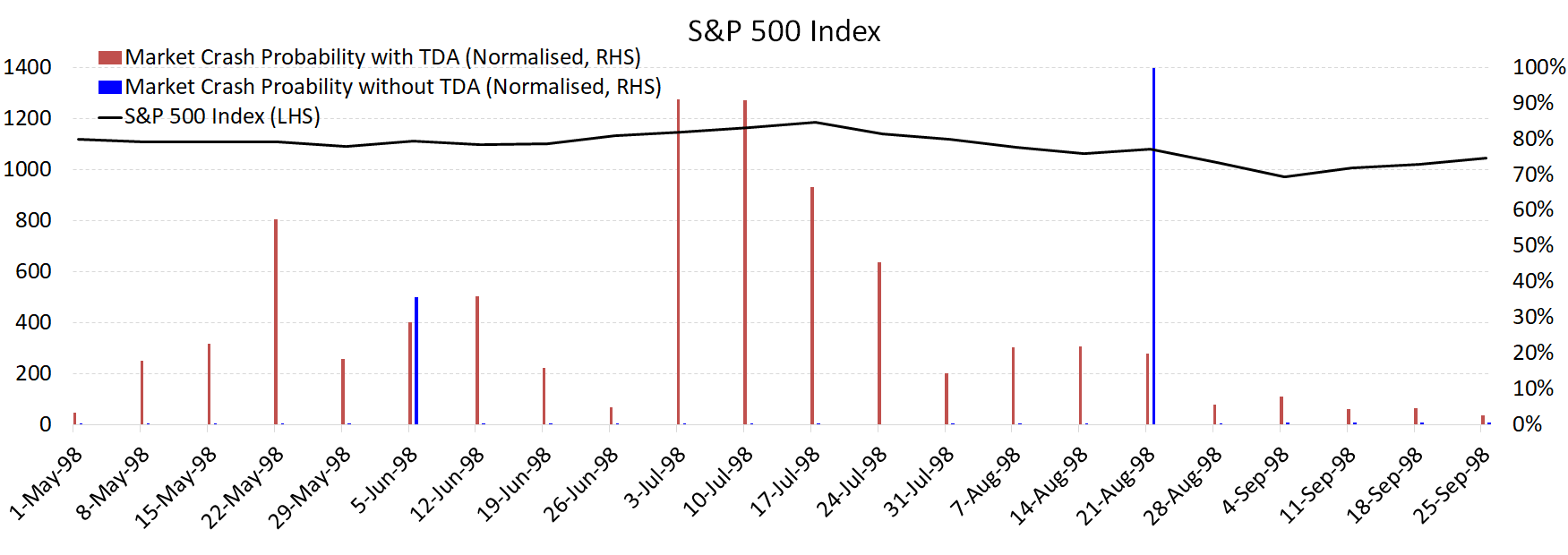
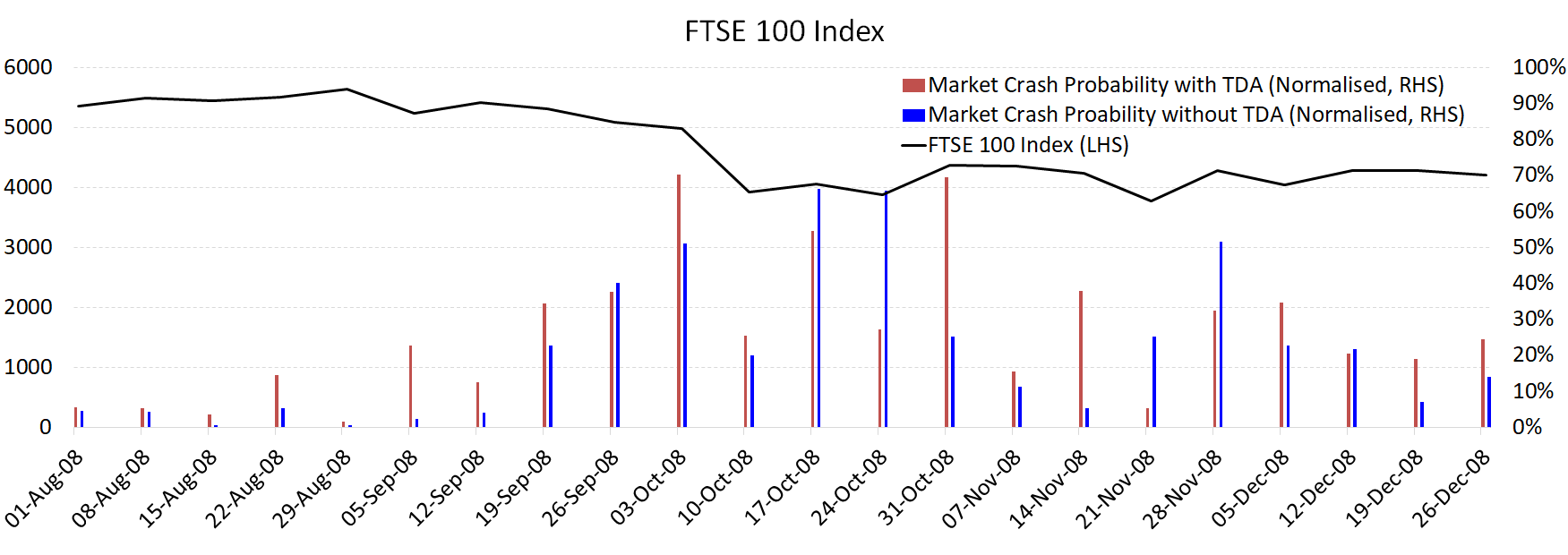


Figure 2: FTSE and HSI for 2008



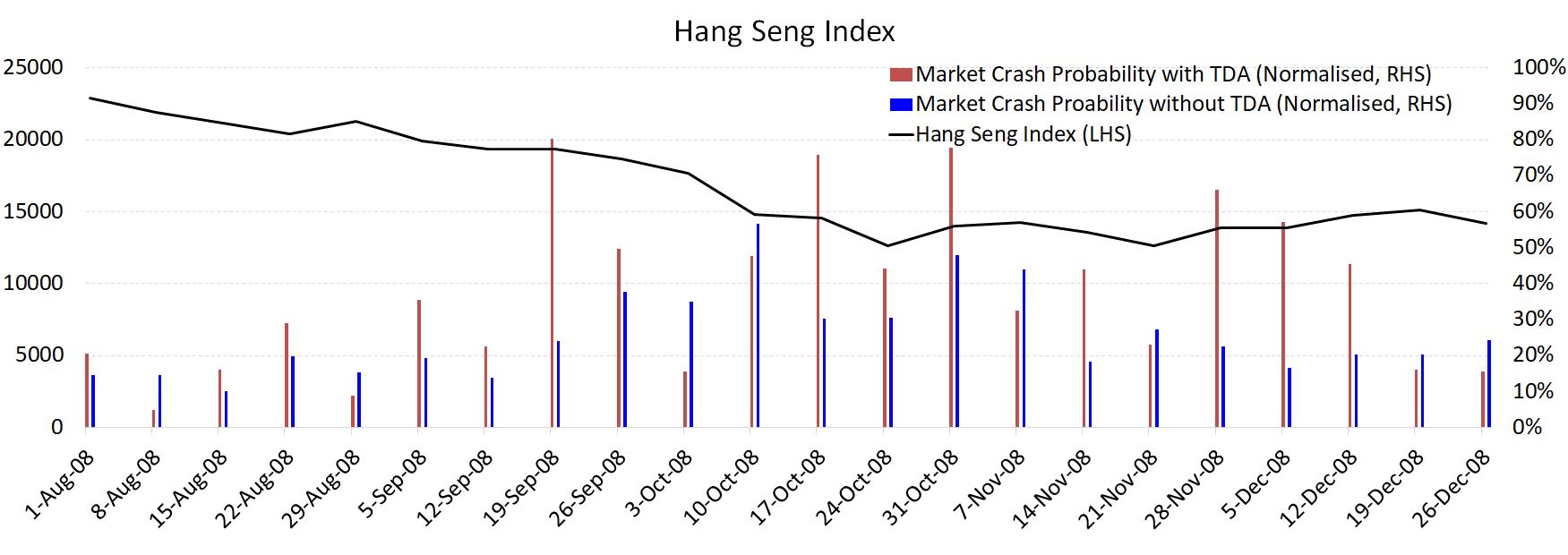
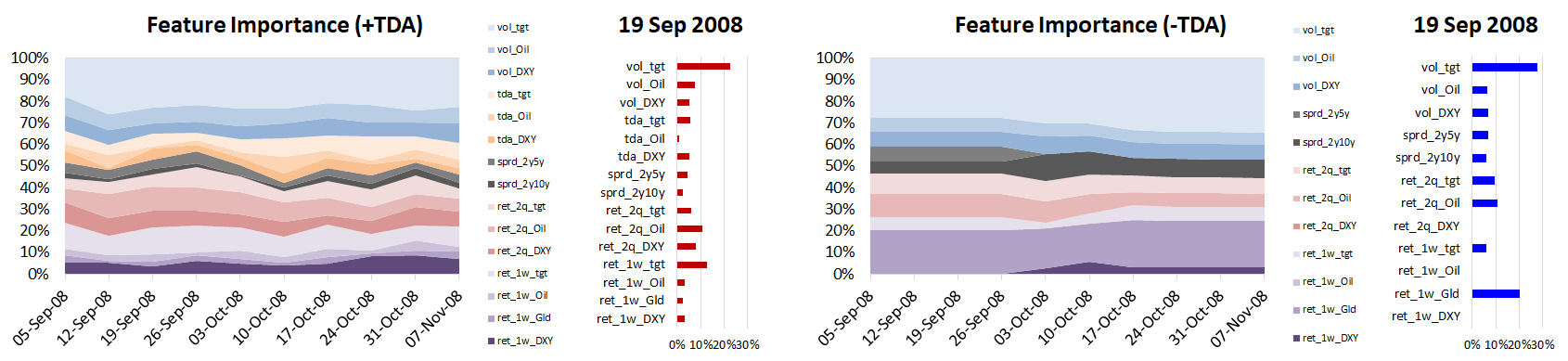


Figure 3: Feature weights for SP 2008 and 1998 with and without TDA



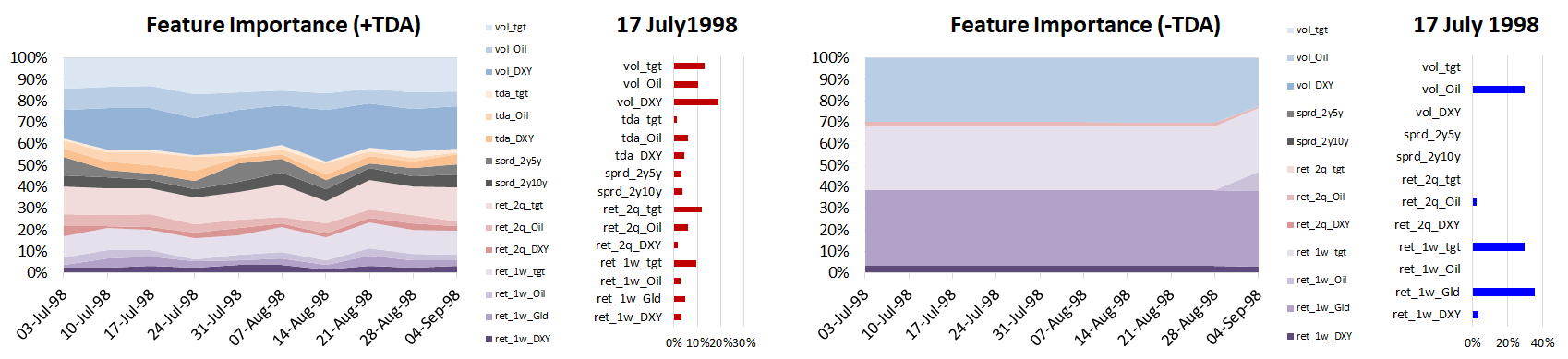
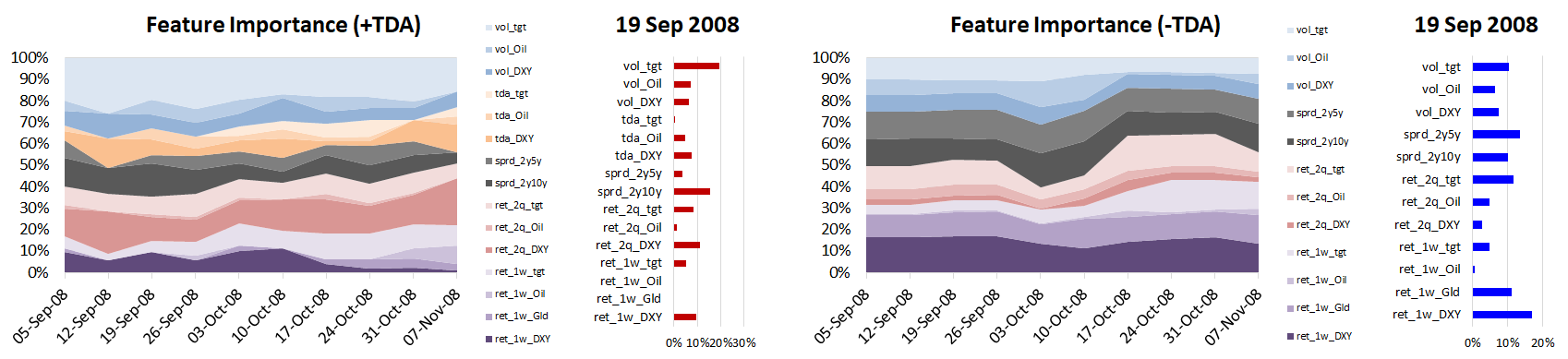


Figure 4: Feature weights for FTSE and HSI 2008 with and without TDA

FTSE 100



Hang Seng

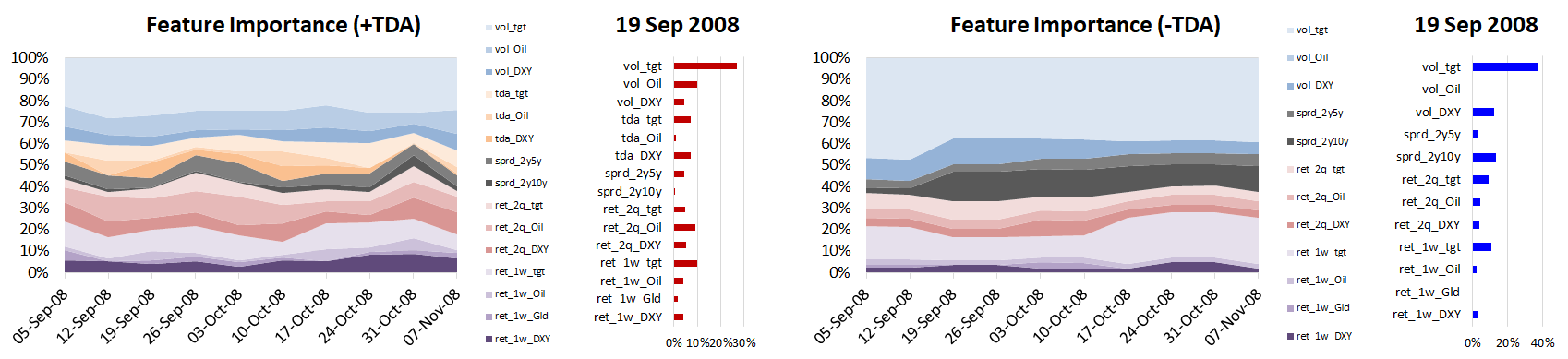


Figure 5: F1 Score for SP, FTSE, HSI

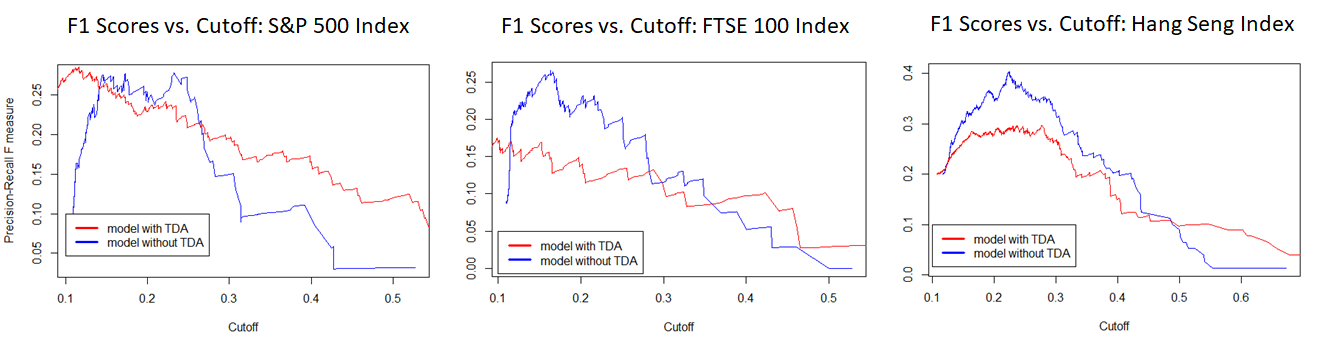


Figure 6: Crash Probability with and without TDA, AUC for SP

