## ASMB-23-206: Supplementary Material

## Comparing Risk Profiles of International Stock Markets as Functional Data: COVID-19 versus the Global Financial Crisis

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## **Derivative Results**

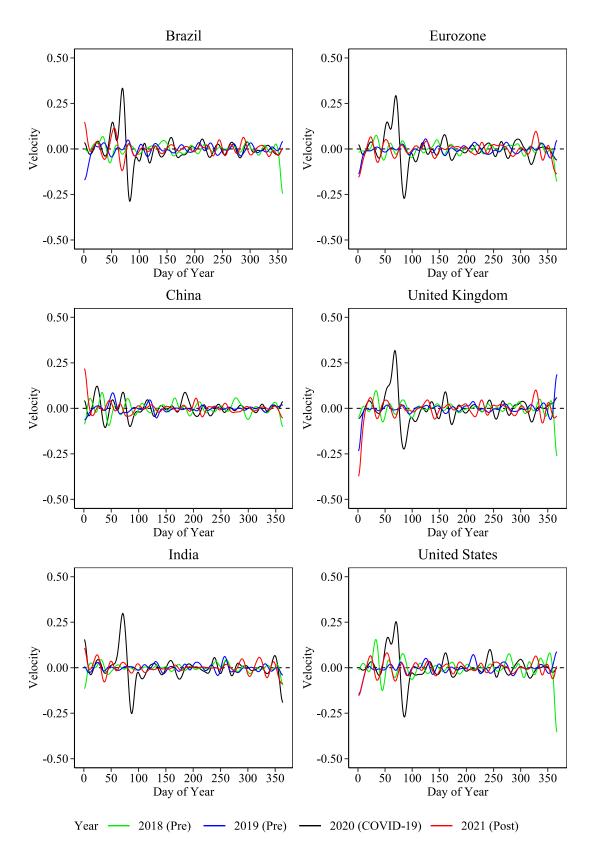


Figure S.1: The first derivative of the realised volatility over the COVID-19 period.

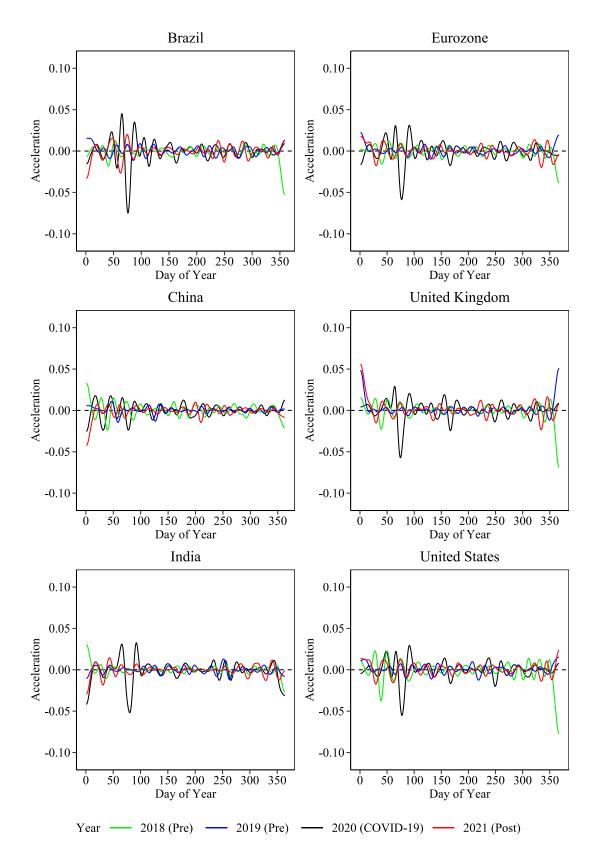


Figure S.2: The second derivative of the realised volatility over the COVID-19 period.

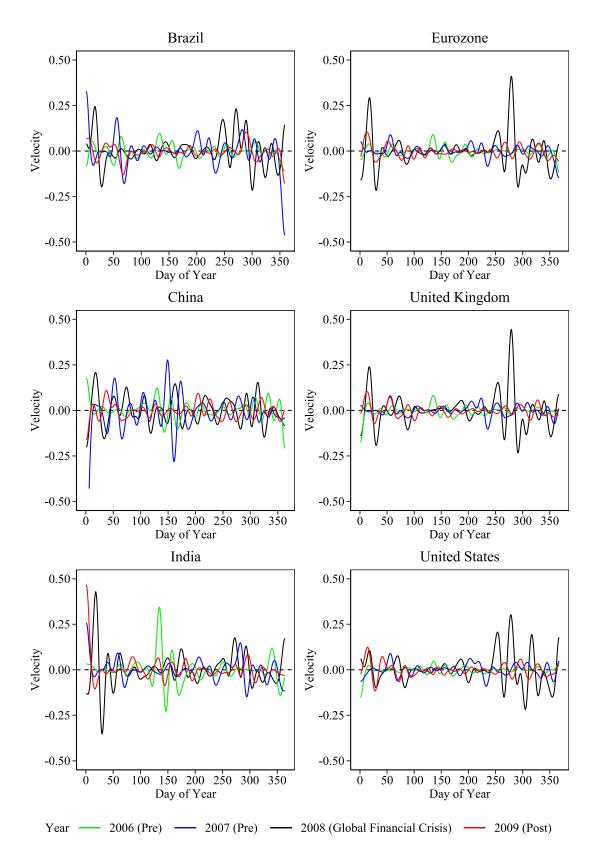


Figure S.3: The first derivative of the realised volatility over the GFC period.

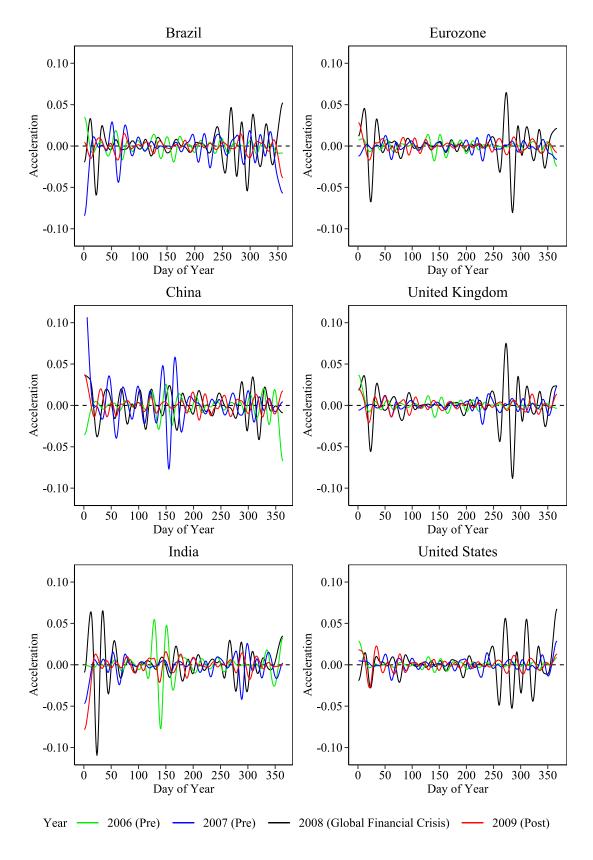


Figure S.4: The second derivative of the realised volatility over the GFC period

## **Functional Regression Results**

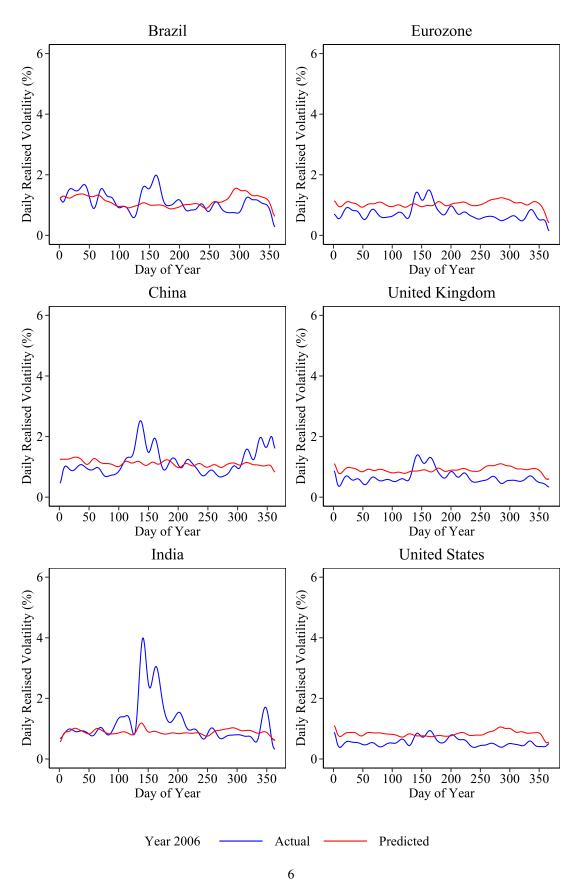


Figure S.5: The actual (blue) and predicted (red) daily realised volatility for all six markets during the year 2006.

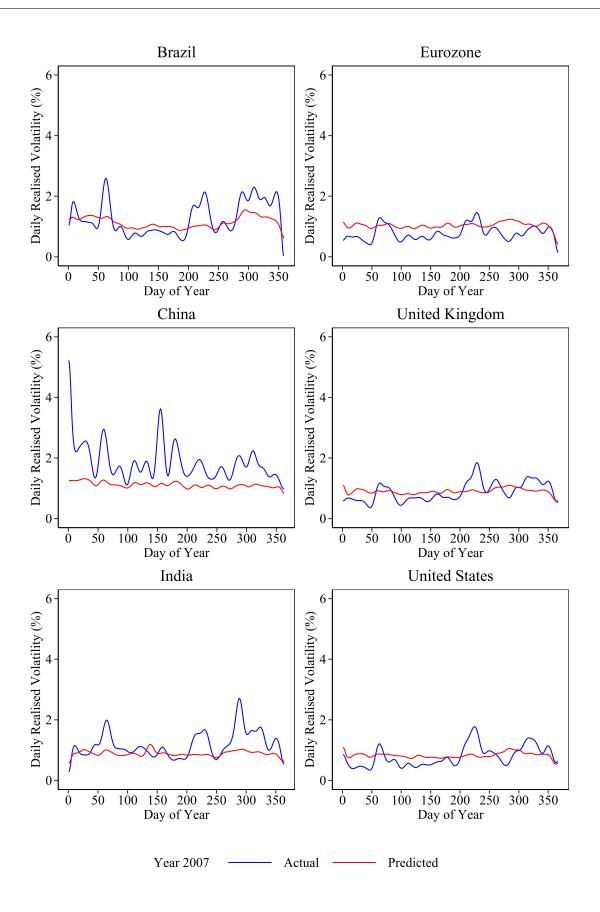


Figure S.6: The actual (blue) and predicted (red) daily realised volatility for all six markets during the year 2007.

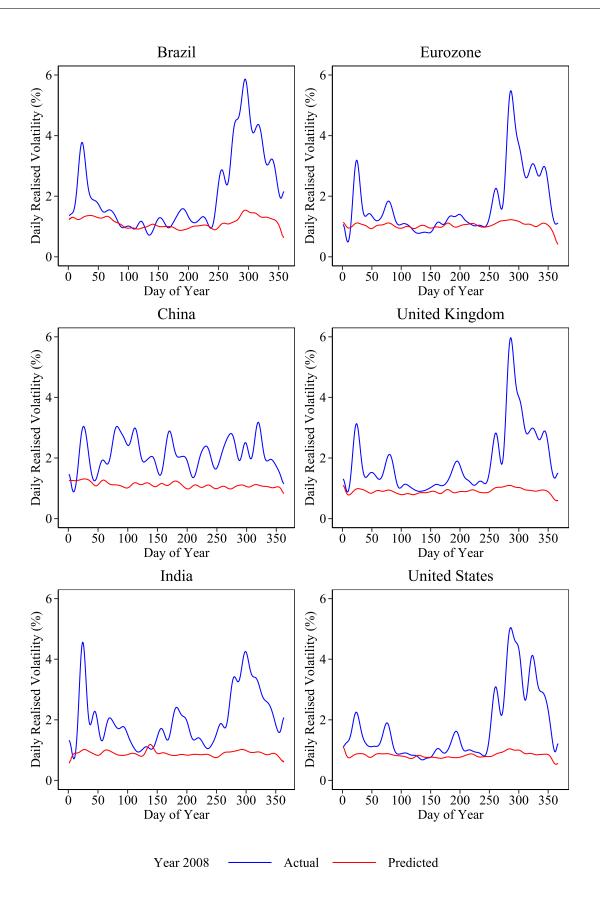


Figure S.7: The actual (blue) and predicted (red) daily realised volatility for all six markets during the year 2008.

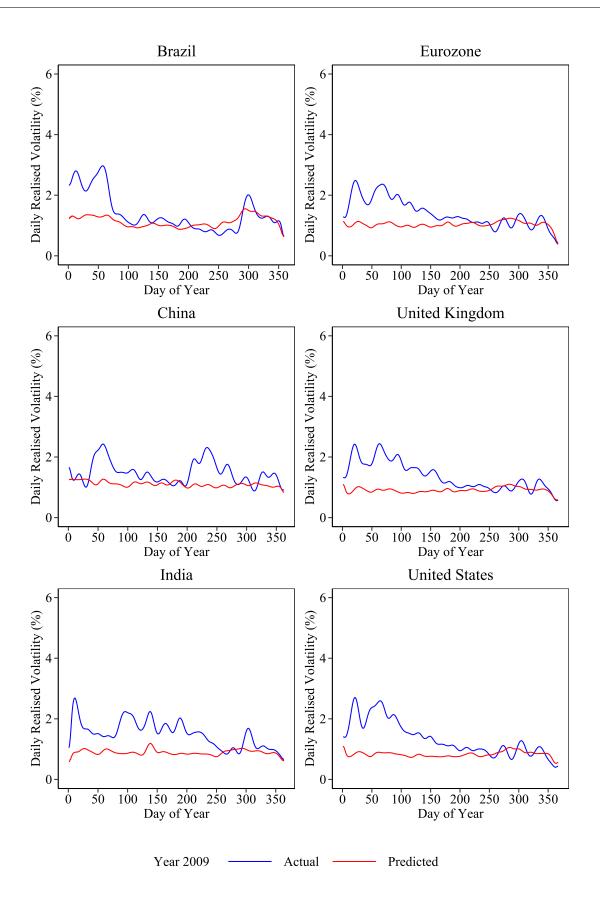


Figure S.8: The actual (blue) and predicted (red) daily realised volatility for all six markets during the year 2009.

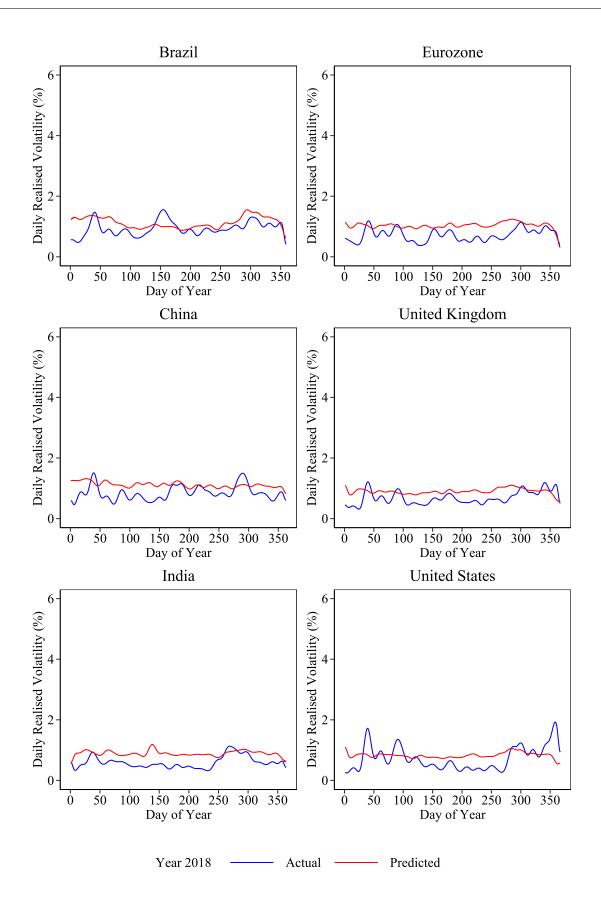


Figure S.9: The actual (blue) and predicted (red) daily realised volatility for all six markets during the year 2018.

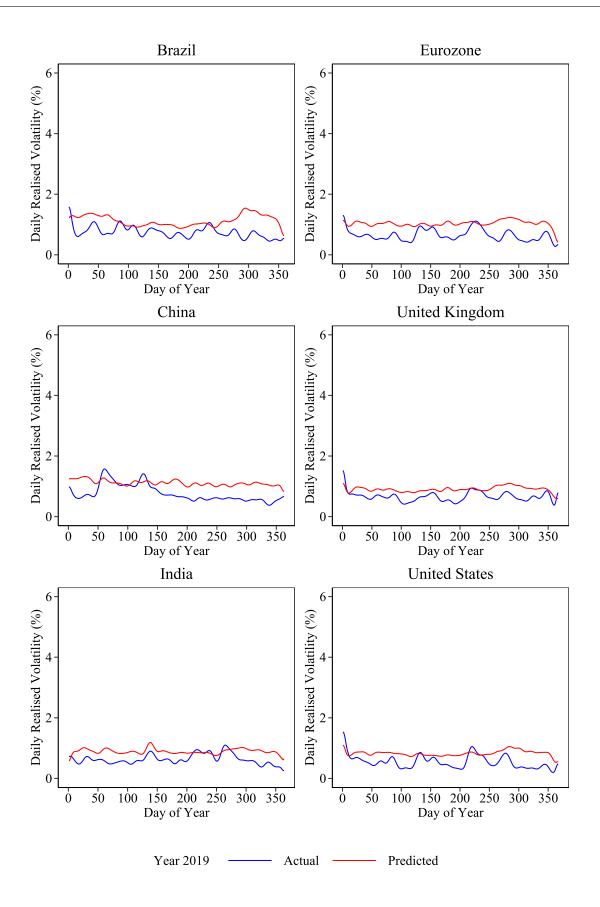


Figure S.10: The actual (blue) and predicted (red) daily realised volatility for all six markets during the year 2019.

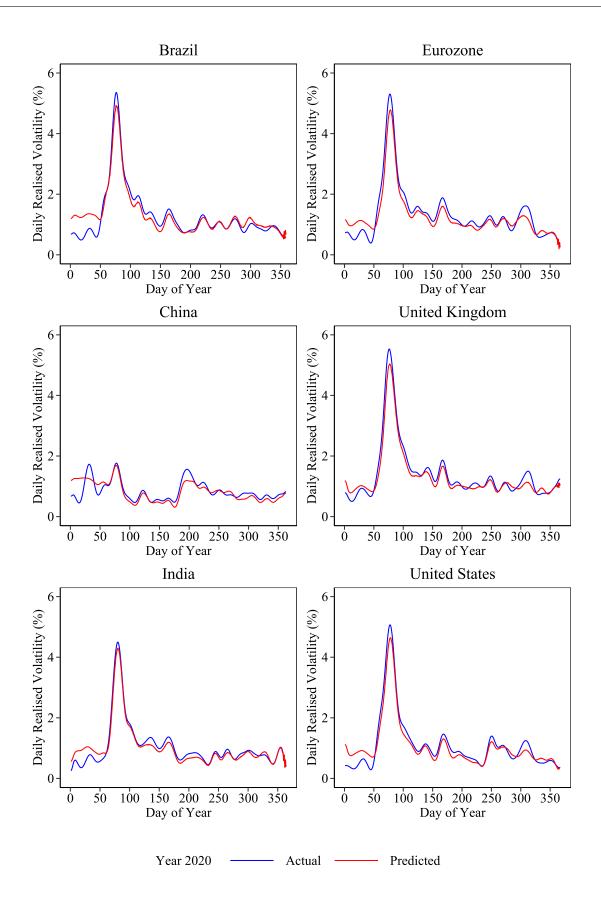


Figure S.11: The actual (blue) and predicted (red) daily realised volatility for all six markets during the year 2020.

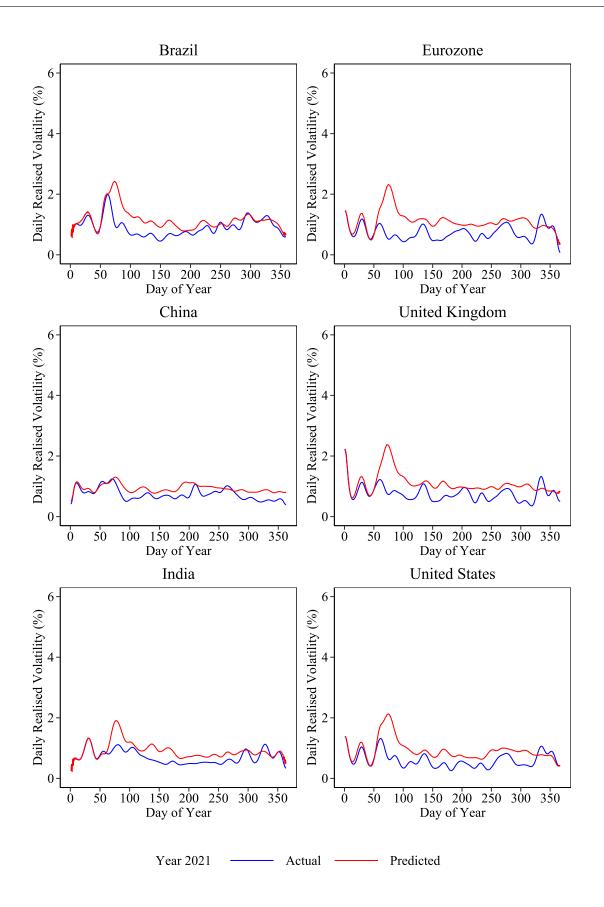


Figure S.12: The actual (blue) and predicted (red) daily realised volatility for all six markets during the year 2021.