

Supporting Information

Multi-Fractal Detrended Cross-Correlation Heatmaps for Time Series Analysis

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Data Availability: + The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

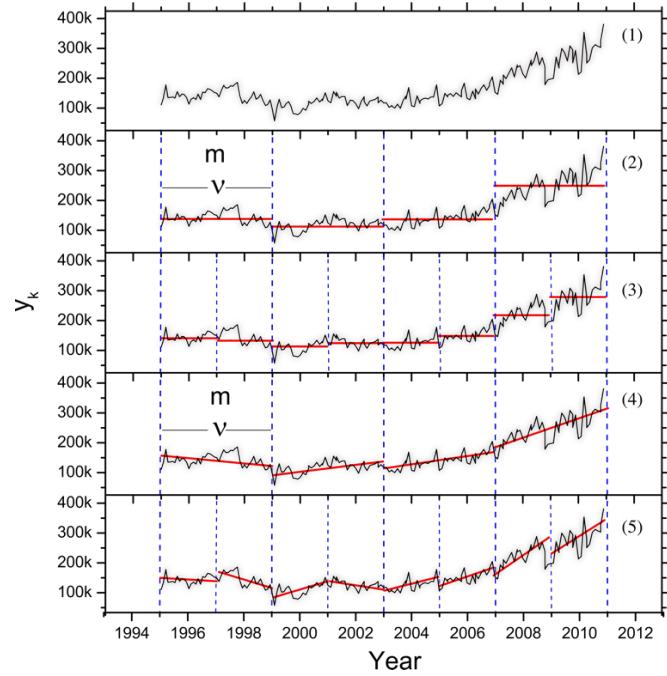


Figure S1: Illustrative steps for Autocorrelation. (1) Time Series of sales y_k in units (Brazilian Automotive Sector), (2) Average (red) of Time series for four windows m of size v , and (3) eight windows. (4) First-order adjustment considering four and (5) eight windows, respectively.

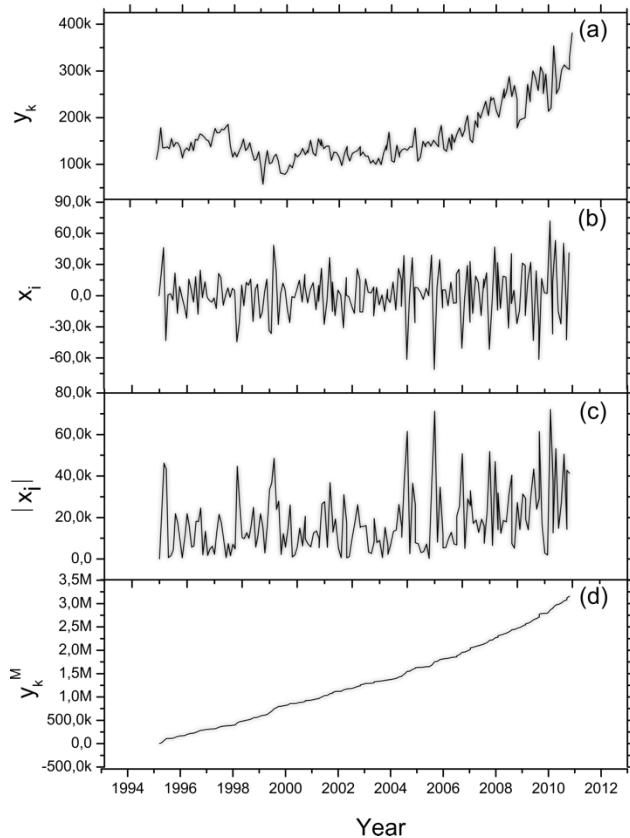


Figure S2: (a) Time series of sales y_k . (b) Time series of successive differences y_k , where $x_i = y_{k+1} - y_k$. (c) Series of magnitudes for successive differences x_i , and (d) Integrated series of magnitudes with $y_k^M = \sum_{i=1}^k |x_i|$.

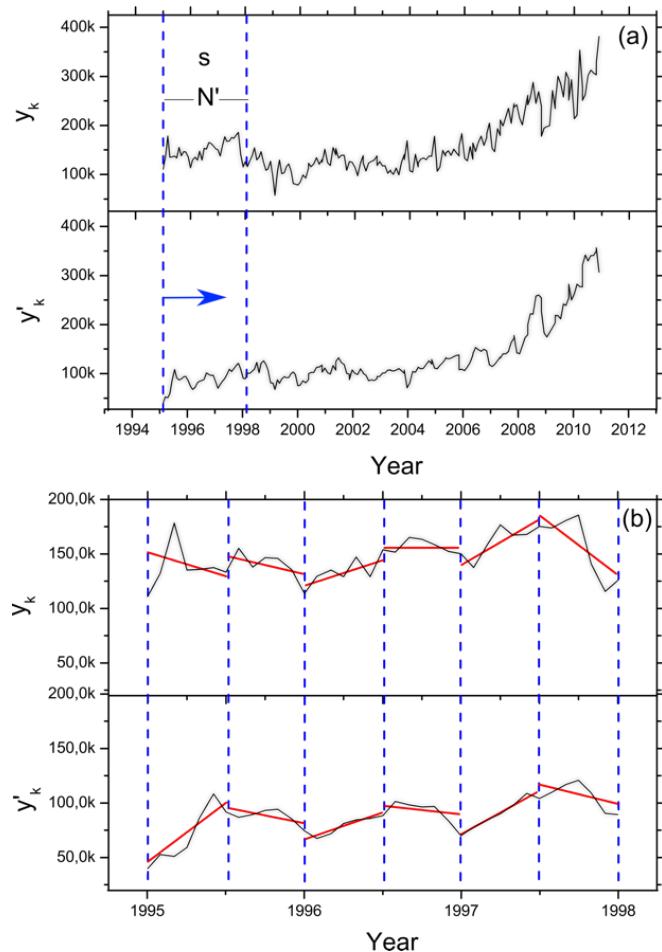


Figure S3: (a) Illustration of the local analysis procedure for sliding boxes of size N . (b) Expansion of the box s divided into six periods m of size v .