

Equity Markets' Clustering and the Global Financial Crisis

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The effect of the Global Financial Crisis (GFC) has been substantial across markets and countries worldwide. We examine how the GFC has changed the way equity markets group together based on the similarity of stock indices' daily returns. Our examination is based on agglomerative clustering methods, which yield a hierarchical structure that represents how stock markets relate to each other based on their cross-section similarity. Main results show that both hierarchical structures, before and after the GFC, are readily interpretable, and indicate that geographical factors dominate the hierarchy. The main features of equity markets' hierarchical structure agree with most stylized facts reported in related literature. The most noticeable change after the GFC is a stronger geographical clustering. Some changes in the hierarchy that do not conform to geographical clustering are explained by well-known idiosyncratic features or shocks.

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