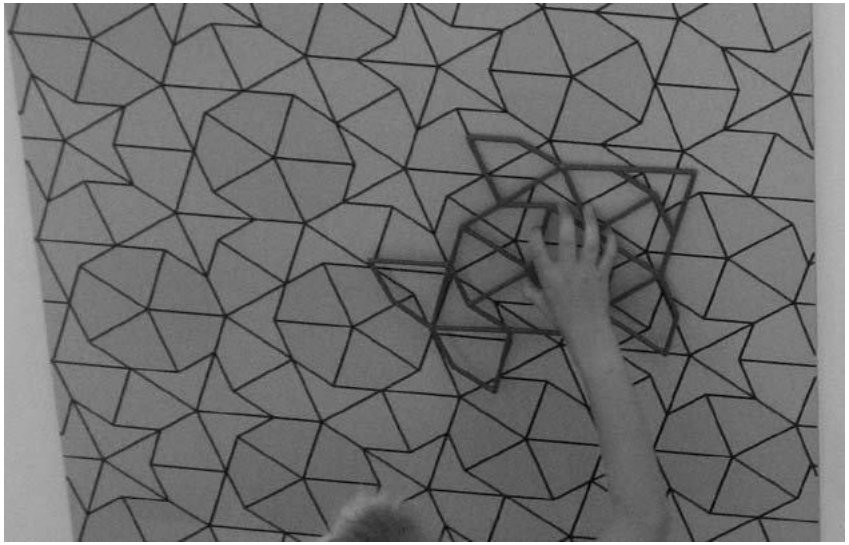

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What Calls to ARMs? International Evidence on Interest Rates and the Choice of Adjustable-Rate Mortgages.

For non-stationary vector autoregressive models (VAR hereafter, or VAR with moving average, VARMA hereafter), we show that the presence of common cyclical features or cointegration leads to a reduction of the order of the implied univariate autoregressive-integrated-moving average (ARIMA hereafter) models. This finding can explain why we identify parsimonious univariate ARIMA models in applied research although VAR models of typical order and dimension used in macroeconometrics imply non-parsimonious univariate ARIMA representations.
Next, we develop a strategy for studying interactions between variables prior to possibly modelling them in a multivariate setting. Indeed, the similarity of the autoregressive roots will be informative about the presence of co-movements in a set of multiple time series. Our results justify both the use of a panel setup with homogeneous autoregression and heterogeneous cross-correlated vector moving average errors and a factor structure, and the use of cross-sectional aggregates of ARIMA series to estimate the homogeneous autoregression.