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CS3 Hook Document

The world runs on money, so understanding how currencies interact with each other on a global scale allows individuals to make predictions about the market and understand how their own currency is performing. Knowledge of these items allows individuals to protect their assets, and even grow them by investing at proper times. Furthermore, nations take interest in these relationships as it allows them to buy off their debt while their currency is strong or make deals with other nations. Two common ways to measure currency strength are purchasing power parity and inflation rate. Purchasing power parity is a measure of how much one unit of a currency can buy in terms of another currency. Inflation rate represents the percentage that the price of goods increased relative to the currency per year. Both of these measures allow anyone to compare currencies, and determine which nations hold economic power on a geopolitical scale.

You have been tasked by the United States government to analyze both purchasing power parity and inflation rate in the United States, Mexico, and Canada, in order to develop knowledge on how the US dollar is performing relative to our neighbors, and if our dollar is influenced by or influences their currencies. This will be done by generating many time-series Granger tests in order to investigate correlations between all possible combinations data, allowing you to generate a report for the government concerning how the United States dollar interacts with the Mexican and Canadian currencies. Furthermore, generating ARIMA predictions would allow the government officials to understand how each currency is projected to change, allowing them to plan ahead for any outcome. By conducting this case study, you will generate multiple models that each explain the connections between the currencies of various nations, providing insight on the interconnectedness of money.