

STA 137 Final Project

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Figure 1: Central African Lumber

Contents

1	Introduction	2
2	Explanatory Data Analysis	2
3	Model Selection	2
3.1	Transformation	2
3.2	ACF/PACF	2
3.3	Candidate Models	2
3.4	Final Model	2
4	Forecast	2
5	Conclusion	2
6	References	3

1 Introduction

Agriculture is a vital part of the Central Africa Republic's (CAR) economy, occupying nearly four-fifths of the national work force (Ref 1). Goods such as crops, timber and diamonds are essential, and the hallmark of CAR's economy. However, it is rare that these goods stay within the republic itself. Many of these items make their way out of the country as exports, which in turn provide capital to keep the country running. Studying the trends of GDP and Exports over time allows us to be informed when deciding whether or not the Central African Republic should agree to certain trade deals. By knowing how dependent CAR is on the wealth of other countries, a delicate balance between domestic independence and international exploitation can be found. Time series analysis will offer insights into year-long trends of the economy.

2 Explanatory Data Analysis

3 Model Selection

3.1 Transformation

3.2 ACF/PACF

3.3 Candidate Models

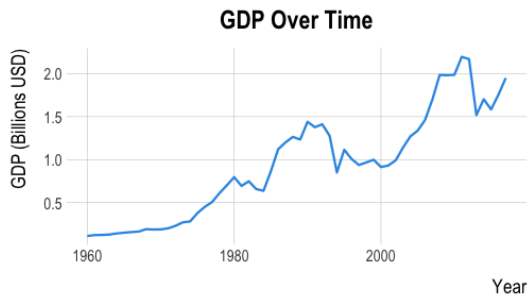
3.4 Final Model

4 Forecast

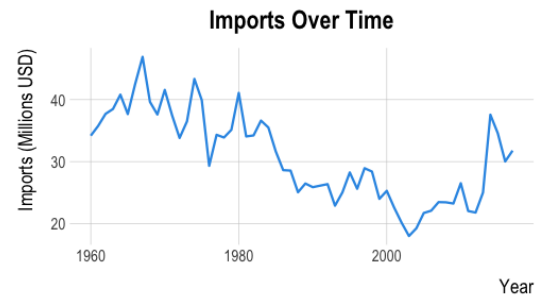
5 Conclusion

6 References

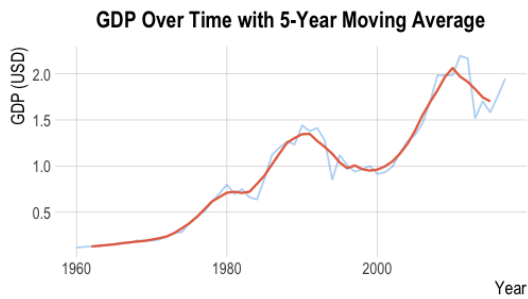
Reference 1: <https://www.britannica.com/place/Central-African-Republic/Economy>



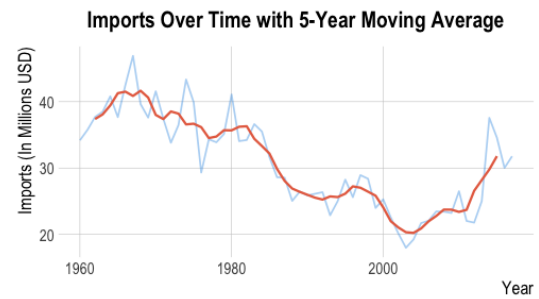
(a) Caption for the first image.



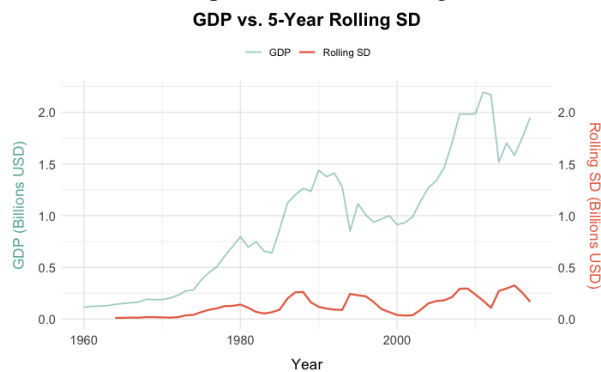
(b) Caption for the second image.



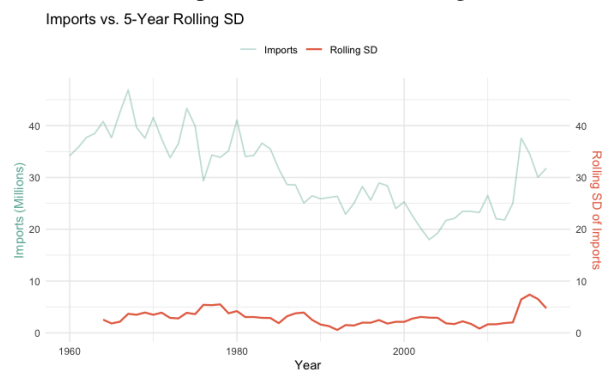
(c) Caption for the first image.



(d) Caption for the second image.



(e) Caption for the first image.



(f) Caption for the second image.

Figure 2: Graphs for EDA.