# **Commodities Prices Evolution**



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Commodity prices, volatile from 2020-2022, stabilized in 2023 and have shown a gradual upward trend.

### **Price Evolution:**

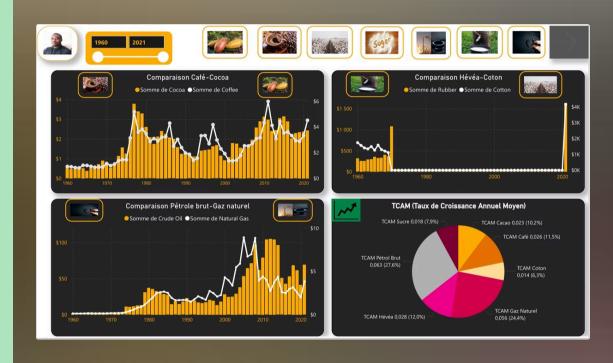
Our analysis of commodity prices reveals significant variations across different sectors. Crude oil prices experienced the most dramatic surge, exceeding \$100 per barrel in 2022 due to geopolitical factors and increased global demand. Natural gas prices demonstrated considerable volatility, influenced by seasonal changes and supply chain disruptions. In the agricultural sector, both cocoa and coffee prices exhibited cyclical fluctuations, with coffee demonstrating more pronounced peaks and troughs, reflecting changes in weather patterns and global demand. Cotton prices saw relatively steady growth until a sharp increase in 2021, likely influenced by production constraints and heightened demand in the textile industry. Sugar prices, while displaying periodic spikes, maintained relatively moderate volatility overall, while rubber prices peaked around 2020, influenced by increased demand and supply-side issues. The following chart provides a detailed visualization of these price fluctuations.



# **Comparative Analysis**

The second dashboard provides direct comparisons between related commodities and includes a TCAM (Average Annual Growth Rate) analysis:

- Coffee and cocoa prices showed strong correlation in their movements
- Crude oil and natural gas prices diverged significantly after 2000
- The TCAM analysis reveals:
  - Crude oil had the highest growth rate at 27.6%
  - Natural gas followed at 24.4%
  - Rubber (hevea) at 12.0%
  - Coffee at 11.5%
  - Cocoa at 10.2%
  - Cotton at 6.3%
  - Sugar had the lowest growth rate at 7.9%





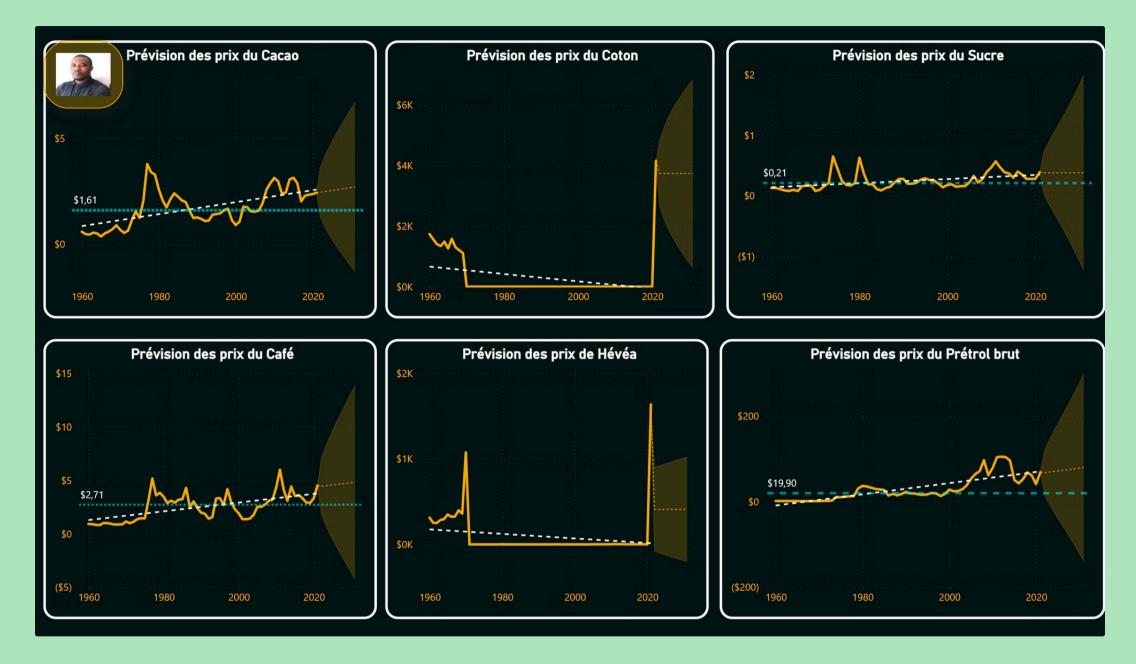
## **Price Variations**

This dashboard presents percentage changes in commodity prices. Notable observations include:

- Cocoa experienced variations between -32.14% and +84.88%
- Coffee showed extreme variations, with peaks of +118.75% and +112.18%
- Cotton displayed consistent negative variations in the 1960s, with a devastating -99.96% drop in 1970
- Natural gas demonstrated high volatility with variations ranging from -55.42% to +91.54%
- Crude oil showed the widest variation range (-47.27% to +290.39%)
- Sugar variations spanned from -52.94% to +209.52%



# **Trend Forecasting**



The final dashboard presents projected trends, incorporating confidence intervals. Lighter-shaded bands represent potential future price ranges, while dotted lines illustrate baseline trends. This indicates a moderate upward trajectory for most commodities, although considerable uncertainty is evident in the widening forecast bands.

#### **Key Overall Insights:**

- 1. Energy commodities (oil and natural gas) experienced the most significant price increases during the observed period.
- 2. Agricultural commodities displayed more cyclical behavior, characterized by periodic price surges.
- 3. Most commodities exhibited heightened volatility after the year 2000.
- 4. Despite short-term fluctuations, the long-term trend for most commodities has been upward.
- 5. The data highlights a strong correlation between the prices of related commodities, especially within the energy sector.

