

Do Commodity Prices Grow Faster Than Global Inflation?

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IT Skills for Research

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- 2 Data Description
- 3 Results and Findings



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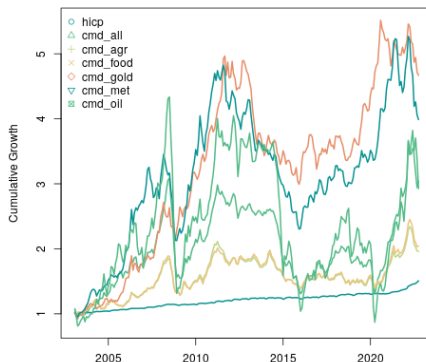
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Overview

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 - Further, we notice a steady growth in HICP, while commodities experience also periods of extended drawdown. This means that depending on the period chosen, we could actually see inflation growing faster than commodities.
 - Nevertheless, in the long term, commodity prices grow faster.
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In this research project, we employed data on the following items:

- The S&P 500 Index
- The Harmonised Index of Consumer Prices (HICP)
- Classified U.S. inflation data (PCE) from St.Louis Federal Reserve Database
- The CRB Commodity Index provided by Bloomberg
- Classified commodity price data from DB-NOMICS



Classes of consumption goods and commodities

Inflation Groups:

- All items
- Durable goods
- Nondurable goods
- Service
- Core



Classes of consumption goods and commodities

Inflation Groups:

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Commodity Groups:

- All items
- Agricultural
- Food
- Gold
- Metal
- Oil



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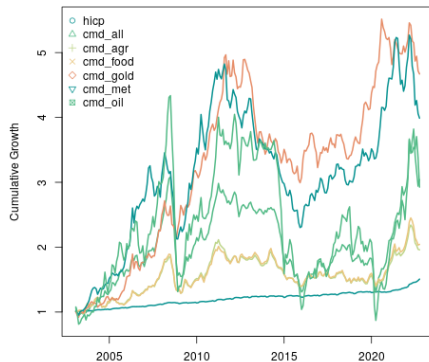
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Simple Answer

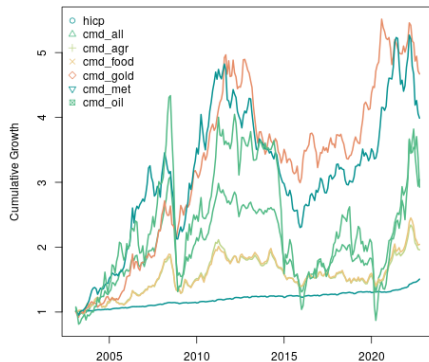
- A brutal but informative plot



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Simple Answer

- A brutal but informative plot
- In the long run, commodity prices do grow faster than inflation



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Simple Answer

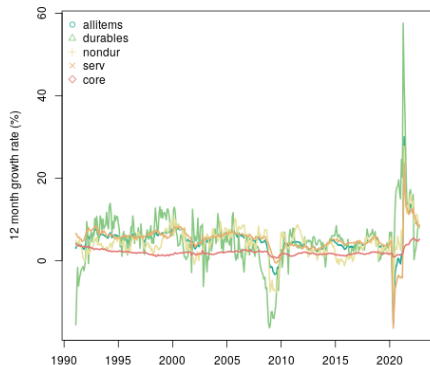
- A brutal but informative plot
- In the long run, commodity prices do grow faster than inflation
- Compared to consumption goods, commodity prices are crazily fluctuating, so not much we can say about short term



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Exploring Inflation

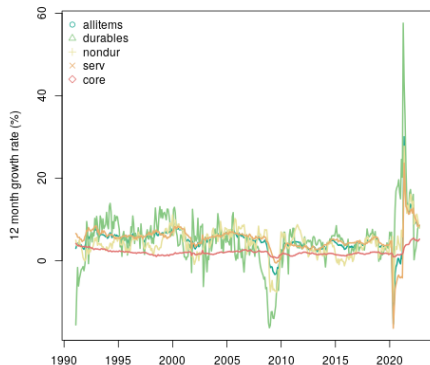
- The plot shows 12-month growth rates of prices of groups of consumption goods



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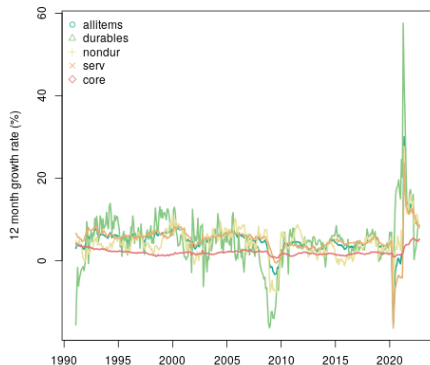
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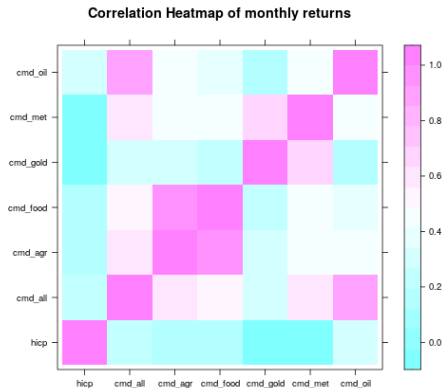
- The plot shows 12-month growth rates of prices of groups of consumption goods
- Some groups, like durables and services, shows volatile price changes
- The overall pace of growth in the all-item and core prices are quite steady



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Correlations?

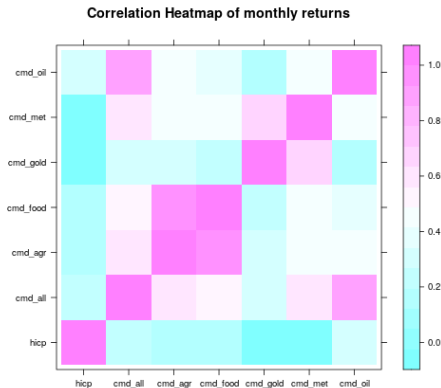
- The first column is of the most interests, showing the correlation between HICP and commodity price growths in different groups



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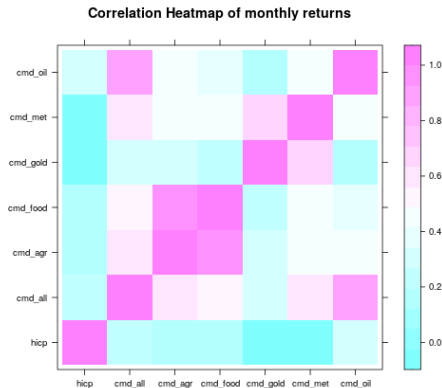
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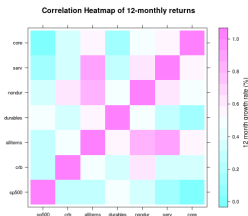
Correlations?

- The first column is of the most interests, showing the correlation between HICP and commodity price growths in different groups
- All of the correlations here are positive, but not too strong
- Oil price is most correlated to inflation among all groups, which is consistent with common sense

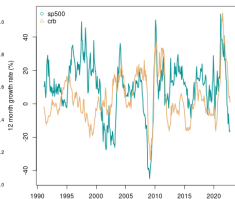


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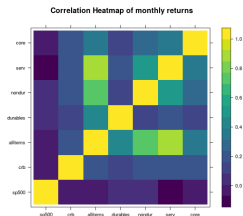
- From Figure 1b, we can see that before 2004, there was no obvious consistency between the stock and commodity indices, while after 2004, the local peaks and bottoms often coincide



(a) Correlation,
12-months



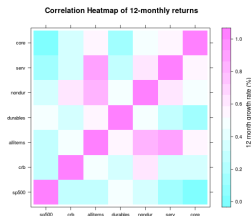
(b) S&P 500 v.s. CRB
12-months



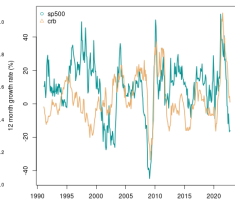
(c) Correlation,
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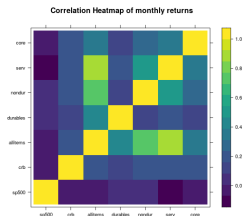
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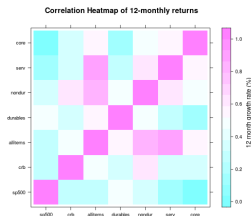
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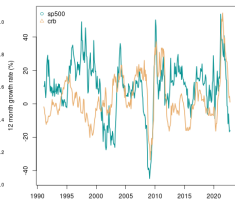
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- Durables and non-durables are most strongly correlated to S&P 500. The longer term sees stronger correlations for durables



(a) Correlation,
12-months



(b) S&P 500 v.s. CRB
12-months



(c) Correlation,
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