Measuring the Information Content of VIX Volatility

Context: Humboldt Project

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Introduction

Motivation: Why this project? Why does Volatility matter?

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- Volatility is not the same as risk, but a closely related concept
  - crucial input to risk measures, such as VaR
  - used for pricing of financial instruments, such as derivatives
  - used for risk-return trade-off and therefore management decisions

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- What is "normal" volatility
  - annual volatility.. monthly.. daily..

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- Joint hypothesis problem
  - Market efficiency per se is not testable

Data

Volatility of S & P 500

- sample period: ..
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Method

- Regression of realized volatility on historic volatility

Results so far

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Possible Problems coming up

Questions currently to solve

- Having gathered all this information about volatility measurement, what is the most accurate way to set up my regression?

Sources

References

Malkiel, Burton G and Eugene F Fama (1970). "Efficient capital markets: A review of theory and empirical work". In: *The journal of Finance* 25.2, pp. 383–417.