

# Digital Tools For Finance: Final Project

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# Overview

## Use of an API

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Information

## Case Study

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Question 2  
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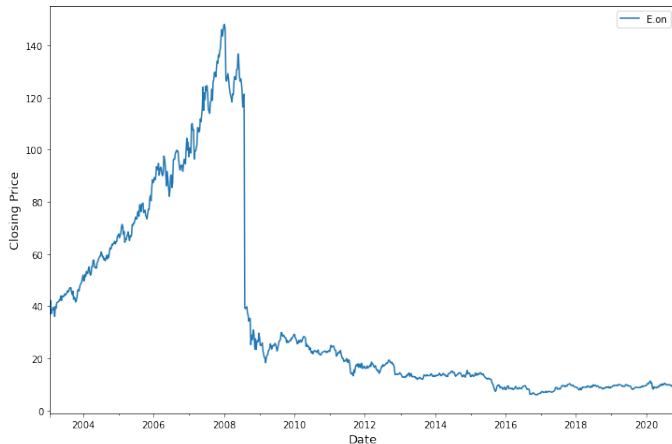
References

## Questions

Questions

# Price change for E.ON

Closing stock price for E.on from Frankfurt Stock Exchange



**Figure:** Conversion of quarterly data into monthly. Source: Own depiction based on Quandl data.

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# Some additional information

- ▶ The data was fetching from quandl.
- ▶ We used an API. The code can be found in the folder Python Code [Smith, 2012].

# Announcement Days

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Acquirer	Target	Announcement Date
AOT	Time Warner	January 10 <sup>th</sup> , 2000
AT&T	Bellsouth	March 6 <sup>th</sup> , 2006
Worldcom	MCI	November 10 <sup>th</sup> , 1997

**Table: Announcement days.** Source: Own depiction.

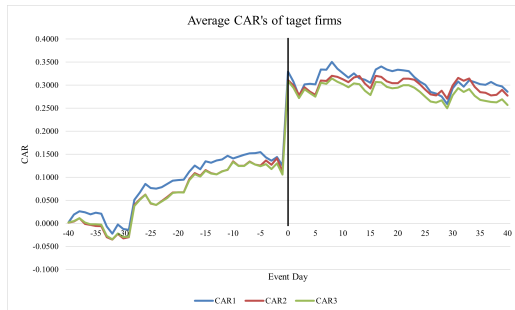


Figure: Target Firms. Source: Own depiction.

# Information Leak

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## Example (Time Wartner)

The previous graph suggests that no information leaked at the time Warner Transaction.

## Example (Bellsouth)

The previous graph suggests that some information leaked before the merger.

The graph in figure ?? suggests that no information leaked on the TimeWarner transaction. In fact, prior to the announcement date CARs of the company were stable. [Smith, 2012]

Bellsouth and MCI, instead show that some information has been leaking prior to the announcement date, in particular if we look the MCI line.[Hofamnn, 2019]

Curabitur condimentum, enim sed venenatis rutrum, ipsum  
neque consectetur orci, sed blandit justo nisi ac lacus.  
[Smith, 2012]



# Significance of the results

## Concept

1. Compute the t-stat.
2. Compare with significance level.
3. Judge if the variable being different than 0 is statistically significant.[Hofamnn, 2019]

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed volutpat ante purus, quis accumsan dolor.

# Abnormal Returns

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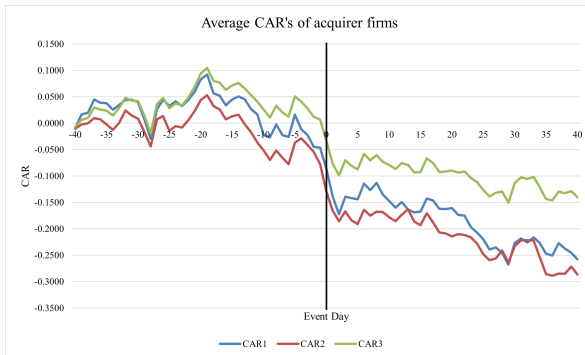


Figure: Acquirer firms. Source: Own depiction.

# References



John Smith (2012)

Mergers in practice

*The Journal of Finance* 12(3), 45 – 678.



James Hofmann (2019)

Abnormal Returns in M&As

*The Journal of Finance* 12(3), 45 – 678.

Thank you for the attention!  
Questions are welcome.